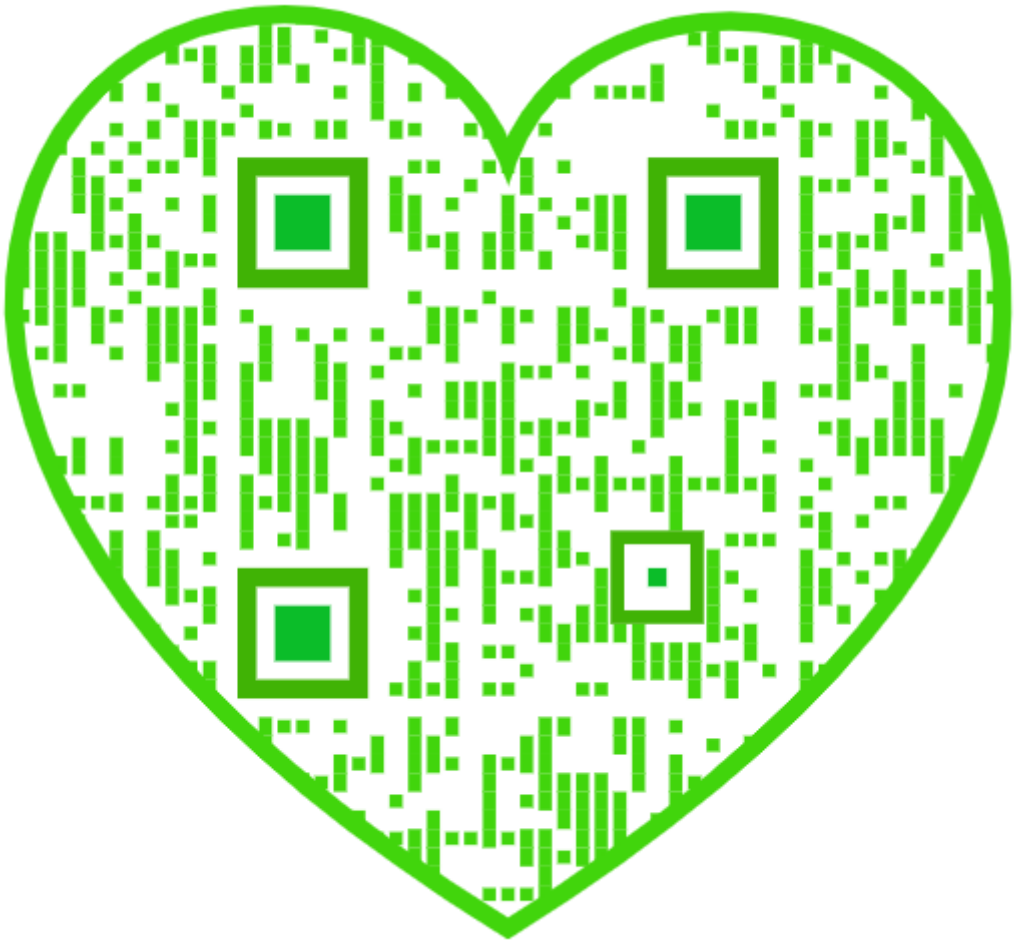
Banking and Business Ethics

Borden-Hooper

H



BANKING AND BUSINESS ETHICS

BANKING AND BUSINESS ETHICS

By

W. E. BORDEN

Former Cashier and Vice-President of the Wayne National Bank, Goldsboro, North Carolina

and

CYRUS LAURON HOOPER

Principal of the Yale School, Chicago, Illinois

Edited by

FRANK L. McVEY

President of the University of Kentucky

RAND McNALLY & COMPANY

CHICAGO NEW YORK

Copyright, 1921, by
RAND McNALLY & COMPANY

Made in U. S. A.

B–22

THE CONTENTS

PAGE

The Preface vii

CHAPTER

I. The Usefulness of Banks . 1
The Bank and the Business World . . 1
Money and Credit 3
Advantages of a Banking Account to the Individual 7
Obligations of Banks and Depositors . . 9

II. The Bank and Its Customers . . . 16
Opening a Bank Account and Making Deposits 16
The Use of Checks 21
The Use of Certificates of Deposit . . . 34
Drafts 35
Credit and How It Is Secured . . . 39
Usage among Travelers . 52

III. Banks and Banking 58
The Development of Banks 58
The Banking Business 61
Classification of Banks 67
Clearing Houses 72
Institutions for Encouraging Saving . . 75

IV. Banking Arithmetic 85
Earnings of Bonds and Stocks . . . 85
Stocks 87
Cost of Dealing in Stocks and Bonds 88
Methods of Computing Interest . 91

V. Analyzing a Bank's Statement . . 106
Resources and Liabilities 106
Protection of Depositors and Stockholders 113

CHAPTER PAGE

VI. Some Famous Banks 119
The Bank of England 119
The Bank of France 123
Development of Banking in the United States . 124

VII. The Federal Reserve Banks 141
Purpose and Organization 141
Working of the Federal Reserve System . . 145

VIII. The Federal Farm Loan Banks 152
Purpose and Organization 152
Method of Operation 154

IX. The Treasury and the Mints 159
Organization and Functions of the Treasury . . 159
The Mints 165
The Subtreasury System 166

X. Saving and Investing 168
Saving 168
Investments 169
Budgets 189
Teaching Thrift in the Schools . . . 191

The Appendix 197
The Index 213

THE PREFACE

The experience of many bankers is that their constant campaigns of advertising make but slow progress in convincing the general public of the many advantages that banks offer as a means of facilitating business operations, of promoting thrift, and of rendering assistance in the making of good investments. There is still too little use made of banking conveniences, there is too little incentive to wise and prudent management of financial affairs, and there is far too great a tendency to make investments that promise to bring quick and fabulous returns, but that end only in loss and disaster. If mature people are so slow to learn obvious lessons, the logical conclusion is that betterment can be brought about only by education.

This book is therefore an attempt to bring high-school boys and girls into closer touch with the business affairs of the life that lies, in most cases, just beyond the high-school age. Every young person is likely to measure his success largely by the amount of his salary. It is desirable, therefore, that the young person entering business should know something of the nature of money, the function it performs, the way it is handled in mercantile affairs, and the manner of its expansion by means of the credit system. Above all, it is necessary for him to understand the meaning of that little word thrift in the conduct of his own life. The authors believe that much help in all these particulars is to be found herein; and they hope that it may be found not only by the young, but also by older persons, business men, farmers, and workers, who have not been able heretofore to find a book of precisely the scope of this.

The book is quite in line with the recent expansion of the school curriculum. The older curricula perhaps overemphasized the value of studies pertaining to the life

of the ancient world; certainly they undervalued the worth of studies pertaining to the present world. In modern schools there is a strong tendency to relate studies to home life, business life, and civic life. It is the desire of teachers to train their pupils so that the change from school life to life out of school will not be abrupt and shocking, but simple and natural. What is more desirable, then, than that the study of banking should receive its share of attention in high-school courses of study? For banking is a subject of such far-reaching importance that no one is ever beyond the influence of it.

The authors wish to express their obligations to Dr. Eugene Clyde Brooks, state superintendent of schools for North Carolina; Charles A. Peple, deputy governor of the Federal Reserve Bank at Richmond, Virginia; J. H. Puelicher, president Marshall & Ilsley Bank, Milwaukee, Wisconsin, and chairman Committee on Education of the American Bankers Association; Henry H. McKee, president National Capital Bank, Washington, D. C., and president National Bank Division of the American Bankers Association; George D. Bartlett, secretary Wisconsin Bankers Association; E. T. O'Brien, cashier Citizens Bank, Kenosha, Wisconsin, and chairman Educational Committee of the Wisconsin Bankers Association; Charles W. Bailey, president First National Bank of Clarksville, Clarksville, Tennessee; William J. Gray, vice-president First and Old Detroit National Bank, Detroit, Michigan; W. J. Jacobsen, president First National Bank, Howard, South Dakota; Rome C. Stephenson, president St. Joseph Loan & Trust Company, South Bend, Indiana; Joseph A. Tabke, president American National Bank, Lincoln, Illinois; W. D. Vincent, president Old National Bank, Spokane, Washington; Edmund S. Wolfe, president First National Bank, Bridgeport, Connecticut; and Charles F. Manchon, secretary-treasurer Bound Brook Trust Company, Bound Brook, New Jersey.

THE AUTHORS

BANKING AND BUSINESS ETHICS

CHAPTER I

THE USEFULNESS OF BANKS

THE BANK AND THE BUSINESS WORLD

1. What a bank is. There is nothing mysterious about a *bank*. It is an institution that deals in money and credit, and in doing so performs two principal functions: receiving deposits and making loans. To these functions a third is sometimes added (in American national banks) in the issue of notes under government supervision to circulate as a substitute for money. It will be seen that a bank performs services of great value to the whole commercial and industrial world. A discussion of the bank's functions must be left to future chapters.

2. The benefits of a bank. Let us consider some of the benefits resulting from the establishment of a bank. In addition to affording a safe and convenient way of caring for money, it teaches thrift, and it simplifies and puts such order and system into a man's business relations with other men that perhaps 90 per cent of all business transactions is carried on by checks and drafts rather than by the cumbersome use of actual money.

Through the activities of its officers and directors the bank gathers much of the idle and active money in the community and puts it out in loans—to farmers, enabling them to bring their crops to maturity; to manufacturers, helping them to buy raw material and to pay their labor while their products are in process of manufacture; and to merchants, who buy the finished products of the factories. Even the railroads and steamship lines are dependent upon bankers for the money not only to build and equip their properties, but also to operate them after they are built.

If there were no banks, anyone who had to pay a debt or make a purchase would have to carry a quantity of gold or silver; and if a journey to a distance were necessary, he would not only have the expense of traveling, with its consequent loss of time, but he would be in danger of loss by robbery. If a man owned shares in a business enterprise in some distant town, all his profits would have to be carried to him on the public roads, with the usual dangers. If he had a quantity of produce, say of cotton or corn, and needed cash immediately, he might not be able to get it, but would have to wait until the product of his labor had been taken to a distant market and the money sent to him. If he contemplated business dealings with a man whose financial responsibility he did not know, there would be no institution to give him the confidential information he desired. A valuable service of credit

information is made available to the commercial world by reason of carefully gathered facts concerning the financial standing, general character, and responsibility of people in their respective communities by banks and bankers; and the important commercial agencies who make it a business to gather such information for the whole country very frequently consult the banks to verify their own records. In this way valuable assistance is given to business houses throughout the country in determining to whom and how far credit should be extended.

In short, if there were no banks, business would be local, narrow, and restricted. There would be no such thing as doing business on credit, which greatly increases the volume of business; there would be no such conveniences as checks, drafts, letters of credit, travelers' checks, and trade acceptances; and many hoards of gold and silver would lie idle, contributing nothing toward the production and distribution of things needed by mankind.

MONEY AND CREDIT

It is stated in the opening paragraph that a bank deals in money and credit. We cannot clearly understand what is meant by that statement unless we know something of the true nature of money and credit.

3. Money. *Money* is a very common thing which is taken for granted by everybody, but to

define it is a matter of much difficulty. A precise definition, satisfactory to all economists, is practically out of the question, but probably as good a definition as any is given by a distinguished American economist (F. A. Walker), who describes money as "that which passes freely from hand to hand throughout the community in final discharge of debt and full payment for commodities, being accepted equally without reference to the character or credit of the person who offers it, and without the intention of the person who receives it, to consume it, or enjoy it, or apply it to any other use, than in turn to tender it to others in discharge of debts or payment for commodities." Horace White, in his book *Money and Banking*, says, "Money is anything that serves as a common medium of exchange and a measure of value." And indeed its most important function is that of facilitating the exchange of goods, chattels, commodities, wages, etc., between individuals, and of furnishing a standard of value against which all such exchanges are measured. The principal kinds of money in circulation are gold, silver, and paper money. As the value of paper money is based upon our faith in the government to redeem it in gold or silver, the element of credit enters strikingly into a correct definition.

Money is also a means of storing up value for future use; but the manner in which it is stored has a marked effect upon its efficiency and upon the

price of commodities. If it is hoarded, and thus taken out of circulation, its efficiency is nullified, until it is again released; if it is stored on deposit in some good bank, its efficiency is greatly multiplied, and there it becomes a potent factor in the development of prosperity.

So much for a definition of money, which the authors do not assert to be complete, or even entirely satisfactory to themselves.

Money came into existence from necessity. Men found through experience that they must have something that everybody would accept if trade and commerce were to grow at all. They made many experiments in their efforts to establish a standard of value. They tried skins, shells, cattle, iron, silver, and gold, as well as many other things, and finally settled upon gold and silver as the most satisfactory, because these metals possess a fairly stable and high value, in small bulk.

As all the great nations have now selected gold as the highest and most desirable type of money, that metal has become a standard of value; that is, the value of all commodities is measured by the value of the standard. (In the United States the standard is the gold dollar, 24.75 grains of gold nine-tenths fine.) As the gold dollar serves as a standard of value, it is also used as a standard of deferred payments, because it is essential that the man who has money coming to him at some future time, in the payment of obligations due him, shall

know that it will be as valuable when the debt is paid as it was when the debt was created.

In time it seemed wise to use paper money as a substitute for gold and silver; but as the value of paper money depends upon the readiness with which it may be exchanged for gold and silver, we have devised, for our own purposes, a treasury in which such metals may be, and are, deposited, and against which paper money is issued. In this way the confidence of the people is maintained in the ability of the government to pay coin for paper money when demanded. The value of money is said to depreciate in times of inflation or of great stringency, such as those through which we have recently passed. In such times, people are prone to be wasteful and extravagant, when that is really the most important time to be frugal and conservative.

In a later chapter we shall explain how the paper money of our national banks is issued and how it is secured.

4. Credit. The other thing a bank deals in is *credit*, which is the power to buy something with a promise of future payment, and also the right to receive a future payment in money. Thus, credit has two sides, one just as important as the other. There are five kinds of credit, primarily: personal, or consumptive credit; commercial, or productive credit; bank credit; capital, or investment credit; and public credit, each one of which has its own peculiar instruments, such as book accounts, checks,

drafts, notes, letters of credit, bills of lading, bonds, debentures, mortgages, etc.

A borrower at a bank, in making a note, promises to pay in the future, and in writing his check he issues an order by which he directs the bank to pay. The bank takes his note, which is the evidence of the credit he has received, and it will pay to the full extent of such credit.

In future pages checks, notes, bonds, mortgages, etc., will be described, showing how modern commerce is carried on by credits based on money.

ADVANTAGES OF A BANKING ACCOUNT TO THE INDIVIDUAL

5. Banking one's credit. When one considers the conveniences and advantages of using a bank, it seems strange that anyone who can use a bank does not do so. A very decided advantage is that a man who banks his money can frequently bank his credit also; that is, by the use of correct methods he can establish credit at the bank. The use of bank credit enables him to save money in his purchases, because the discount which the seller allows for cash payment is ordinarily much greater than the interest on the borrowed amounts.

For example, a farmer running a store account with a time merchant[1] for the goods he needs, agreeing

[1] A *time merchant* is a merchant who sells his goods on time terms, generally, in the Southern states, to farmers, who buy supplies from him all during the year and arrange for payment at harvest time.

to pay at harvest time, is charged a profit on the goods ranging from 10 to 40 per cent additional. If the farmer establishes a substantial credit at the bank, he can borrow money at a rate varying from 6 to 10 per cent a year, according to the locality in which he lives, pay the merchant cash, and thus make a considerable saving. A substantial aid to the farmer, in establishing such credit, would be obtained if he would make it a practice to deposit *all* of his money in the bank. Many farmers still make the mistake of drawing *all* cash when selling their products, instead of leaving all or a part of such proceeds in the bank to their credit, to be used later as it is actually needed.

6. Prestige of the depositor. Furthermore, the man who pays his bills by drawing checks or drafts on a bank against his deposit is accorded a certain degree of respect and deference not given the man who does not use this method. He enjoys a certain prestige, a reputation of being a substantial man of affairs; while the other man is supposed to be ignorant of these values or unable to take advantage of them. If a man does not pay by check, it is supposed that he cannot.

7. The bank as a bookkeeper. A person of good business judgment will deposit, regularly, all his money in a sound bank and pay his bills by check. By this means he keeps an accurate record of his income and his expenditures. This matter will be explained in detail later.

OBLIGATIONS OF BANKS AND DEPOSITORS

8. Selecting your bank. The matter of selecting your bank is a subject of much importance to you. Whether you are a small depositor, accumulating a competence with patient care, or a large depositor, with much business of various kinds to transact, you want to know that the bank is safely managed, so that your money will be returned to you when you want it. You must learn, therefore, the character and standing of the men at the head of the institution with which you contemplate dealing. You will want to know whether they are progressing or otherwise, for no business stands still; it goes either forward or backward. Learn to analyze a bank statement (see chapter v, page 107) so that you may know the condition of the institution. You have ample opportunity to do this, for banks must publish sworn statements of their affairs, by order of the authorities, perhaps four or five times a year.

If in the conduct of your business you need the use of more money than you have at your command (and most progressive men do), you will become a borrower of money. It is well, therefore, for you to acquaint yourself with the policy of the bank with which you are thinking of allying yourself — to learn whether it is ultra-conservative, or otherwise; whether it makes industry the servant of money, or whether its funds are used to promote industry, within safe and reasonable bounds. Some banks are conducted in one way and some in another.

Money, of course, should be the servant of industry. A certain Chicago bank advertises that its prosperity has been gained by aiding young men in financing their businesses. This is the right kind of bank, and it deserves its prosperity. It is important for you to know the difference between such an institution and one that either cannot or will not lend you the money to carry on safe and legitimate enterprises.

9. The borrower's obligations. It cannot be too strongly emphasized that *character is the basis of credit.* The bank expects the same high character of you that you demand of the bank. The bank engages itself to pay back to you, when you call for it, the money you deposit with it, and it carries out this engagement to the letter. It is important, therefore, when you promise to pay, on a certain day, some money you have borrowed, that you be as prompt as the bank in meeting obligations. Such a policy will greatly strengthen your credit and mark you as a dependable man.

10. Borrowing money. After selecting your bank with the intention of becoming a borrower as well as a depositor, you should become acquainted with at least one of the officers. Get some one to introduce you—and be sure that you are introduced by a responsible person—to the president, or vice-president, or cashier, or all of them. Then state frankly and freely what your business is, what you own, what you owe, and what your prospects of success are. Be frank. Keep nothing back. Make

a friend of your banker by concealing nothing regarding your financial condition. He needs the information in order to be able to deal intelligently with you, for it is his business to guard with scrupulous care the money which has been intrusted to him for safe-keeping. If you do not give him full information, the chances are that you will not get the accommodation you need for the successful operation of your business. You need have no fear of answering all his questions, for business matters intrusted to him are held in strictest confidence.

11. Credit statements. Many of the most successful men and corporations now make it a practice to file with their banks, once a year at least, a full statement of their assets and liabilities and the result of the year's operations in business. A sample form of such a *credit statement* is given in Figure 1 (pages 12–13). Note its similarity to the bank's own statement (page 107).

12. The banker's duty to the public. It should be the banker's constant aim to make his bank a true servant of industry, to the end that labor may be kept employed, the crops be brought to harvest, commerce and trade be facilitated, and the general welfare of the community in which he lives be promoted. He must at the same time guard with jealous care the safety of the funds left with him by the public for safe-keeping. Every other duty he owes to the public is secondary to this fundamental—*safety for the people's savings.*

857. CREDIT STATEMENT—Partnership or Individual.

To THE CAPITAL NATIONAL BANK, RALEIGH, N. C.

Name ..... Location .....

Business ..... Branches, if any .....

For the purpose of procuring credit with the above bank for ..... negotiable paper, ... furnish the following as being a fair and accurate statement of ..... financial condition on the ..... day of ..... 19 .....

ASSETS		LIABILITIES	
Cash		Bills Payable for merchandise	
Bills Receivable, good		Bills Payable to banks	
Accounts Receivable, good		Open Accounts	
Merchandise (how valued)		Loans or Deposits	
Real Estate in name of firm		Mortgages or Liens on Real Estate	
Machinery and Fixtures		Other Indebtedness and of what composed	
Other Assets and of what composed			
		Total Liabilities	
		Net Worth	
Total		Total	

Specify any of above Assets pledged as collateral.

Specify any of above Liabilities secured by collateral.

Individual worth of respective partners outside of the business. .....

Names of all general partners .....

Names of special partners with amounts contributed by each and until when. .....

Contingent liability .....

Connections of each partner in other business, if any. .....

Insurance carried on merchandise ..... on building .....

Amount of sales preceding year .....

Expense of conducting business preceding year .....

Amount withdrawn by partners preceding year .....

Time have been in business .....

And whom succeeded .....

State last date of taking trial balance proof .....

Regular times of balancing books .....

Please sign here .....

FIGURE 1. *A credit statement*

It is therefore required of him that he be a *conservative* as well as a *progressive;* to fill both requirements he must of necessity be a man broad-visioned and alert, intelligent, public-spirited, and a sound judge of values and of men. As a rule he is all this, else he and his bank would soon be in trouble, either from bad investments or from lack of public support.

He never should, and rarely does, exact usurious interest from borrowers, because he knows, or should know, that the bank he manages is a public institution, in which not only his stockholders but also his hundreds, perhaps thousands, of depositors, as well as the public at large, have a vital interest. The true banker will ever keep before him the thought that his mission is to help, not to hinder. He should be patriotic; that he is so was evidenced by his untiring work in selling to his depositors the billions of Liberty Bonds necessary to carry on the World War.

It is his duty to keep well informed as to the value of securities, so that he may be able to give sound advice in regard to investments when called upon to do so by his customers. If the bankers of the country were more frequently consulted, there would be saved annually many millions of dollars which are now lost in "wild-cat" speculation.

The banker should be ever ready to give financial assistance to any worthy man or enterprise able to furnish adequate security, and especially should he

be considerate of young men of character and ability who seek his counsel and assistance.

He should maintain the strictest integrity at all times—a man standing four-square for progress, sobriety, justice, and reverence for things spiritual and eternal.

Questions for Discussion

1. What are the functions of a bank?
2. What benefits does it offer?
3. What are money and credit, and what does a bank have to do with them?
4. How does a well-managed bank contribute to the growth and prosperity of a community?
5. How would the farmer be inconvenienced if there were no banks? The grocer? The shipowner? The laborer?
6. What is meant by banking one's credit?
7. What benefit does a merchant get from the credit his bank gives him?
8. Why does a man who pays by check have a certain prestige?
9. What are the obligations of the borrower?
10. What are the duties of a banker to the public?

CHAPTER II

THE BANK AND ITS CUSTOMERS

OPENING A BANK ACCOUNT AND MAKING DEPOSITS

13. Deposit slip and pass book. A bank account, in a commercial bank, is opened when the first deposit is made. The depositor fills out a *deposit slip*, on which he records the amount, or amounts, which he wishes to leave with the bank subject to his order or demand, and receives in return a *pass book*, in which the teller records the same amount or amounts. The credit entries in the pass book are the bank's receipts to the depositor. The book should always be presented at the receiving teller's window when deposits are made, and care should be taken to see that the amount credited agrees with the total amount on the deposit slip.

In making the deposit slip the depositor should arrange the bills in order, face up, and according to denomination—tens with tens, fives with fives, ones with ones, etc., and he should *indorse* each check—that is, write his name on the back of it—and list it separately as shown in Figure 2, a deposit slip for a checking account. Care in this respect makes a favorable impression at the bank, as it

FOR DEPOSIT BY

Elihu Baldwin

IN THE

National State & City Bank

MINNEAPOLIS, MINN.

July 2, 1929

	DOLLARS	Cents
CURRENCY	50	00
COIN	10	67
CHECK ON New York	76	45
Pittsburgh, Pa.	17	34
Baltimore, Md.	49	36
Petersburg, Va.	36	50
Atlanta, Ga.	97	81
Columbia, S.C.	101	50
Raleigh, N.C.	22	33
Birmingham, Ala.	56	47
Jacksonville, Fla.	94	39
Memphis, Tenn.	50	00
	662	82

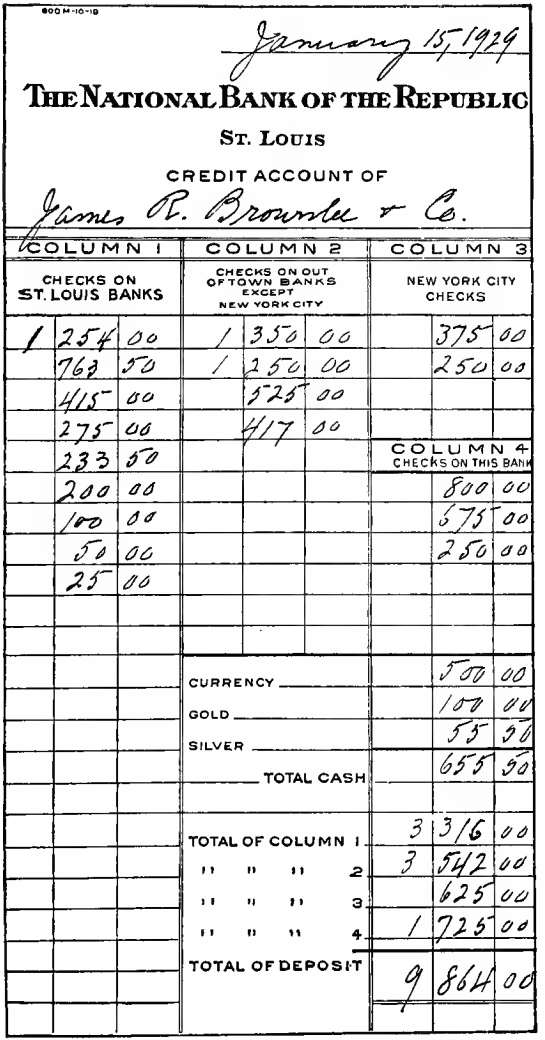
Checks, notes, drafts, acceptances, and other items not payable in this city, whether entered as cash or not, are received and forwarded for collection at depositor's risk only, until we have received actual payment, and we assume no responsibility for items lost in the mail.

FIGURE 2. *Deposit slip for a checking account*

shows method in business matters. Besides, the bank is usually a very busy place, and the time of the teller should not be taken up with getting deposits in order.

14. Depositing out-of-town checks. A footnote at the bottom of the deposit slip in Figure 2 is worthy of careful attention, because it means just what it says. A bank gives immediate credit for out-of-town checks deposited with it, but it does so with the understanding that if any of the checks are lost in the mail in the course of their collection, it will be the depositor's duty to get duplicates; or, if any of the checks deposited are not paid by the bank on which they are drawn, the depositor must make good the amount. The collection of out-of-town checks is simply a courtesy extended by the bank to its depositors, and it assumes no responsibility except that of using its best care in serving them.

15. Deposit slip of a city bank. Banks in large cities have special deposit slips because of the great number of checks they handle. Figure 3 is an example. In Column 1 the depositor records the amounts of all checks drawn on St. Louis banks except the National Bank of the Republic itself. In Column 2 he records the amounts of all checks on out-of-town banks except those of New York City. Column 3 is for New York City checks alone, and Column 4 is for checks on the National Bank of the Republic. Below there is a space for



800 M-10-19

January 15, 1929

THE NATIONAL BANK OF THE REPUBLIC

ST. LOUIS

CREDIT ACCOUNT OF

James R. Brownlee & Co.

COLUMN 1 CHECKS ON ST. LOUIS BANKS			COLUMN 2 CHECKS ON OUT OF TOWN BANKS EXCEPT NEW YORK CITY			COLUMN 3 NEW YORK CITY CHECKS		
1	254	00	1	350	00		375	00
	763	50	1	250	00		250	00
	415	00		525	00			
	275	00		417	00			
	233	50				COLUMN 4 CHECKS ON THIS BANK		
	200	00					800	00
	100	00					575	00
	50	00					250	00
	25	00						
			CURRENCY				500	00
			GOLD				100	00
			SILVER				55	50
			TOTAL CASH				655	50
			TOTAL OF COLUMN 1			3	316	00
			" " " 2			3	542	00
			" " " 3				625	00
			" " " 4			1	725	00
			TOTAL OF DEPOSIT			9	864	00

FIGURE 3. *Deposit slip for a large city bank*

PASS BOOK NO. 31875

Merchants Savings Bank

DES MOINES

CREDIT SAVINGS ACCOUNT OF

NAME Marion Rich

ADDRESS 1575 Morgan Street

DATE April 21, 1929

	DOLLARS	CENTS
CURRENCY	25	00
SILVER	5	00
GOLD	5	00
COUPONS	10	00
CHECKS	13	75
	10	50
	22	00
	91	25

LIST EACH CHECK SEPARATELY

FIGURE 4. *Deposit slip for a savings account*

recording currency, gold, silver, the totals of the different columns, and the total deposit. Depositors should take care to fill out the slip accurately, and thus save the bank employees much time and labor.

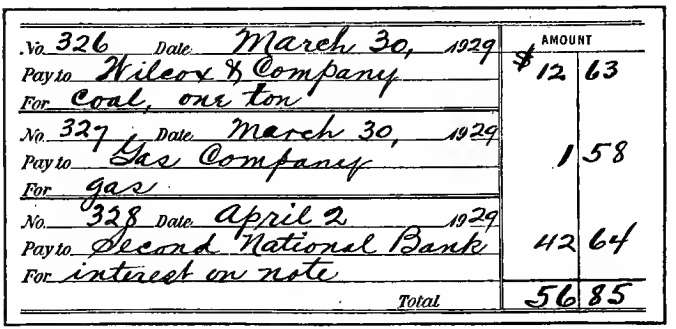
In Figure 4, on the opposite page, is shown the form of deposit slip that is in general use for a savings account.

THE USE OF CHECKS

16. Check book. In addition to a pass book, the new depositor receives a *check book.* It contains a number of blank checks and some pages on which are kept a record of all checks paid, and usually other pages on which a record of deposits is kept, so that the depositor may have at all times an exact knowledge of his balance; that is, the amount he has left after all payments have been deducted. Figure 5, on page 22, is one form of check book. On the left-hand page is a record of three checks that have been paid; between the left- and the right-hand page were the three checks that have been filled out and sent to persons to whom the money was due; on the right-hand page is the balance carried forward from preceding pages, a record of deposits, a deduction for the three paid checks, and the balance, which, in turn, is carried forward to the next page.

It is very important to the depositor that he should keep a proper record of all deposits made,

of all checks drawn, and of the exact balance due him from the bank. Unless he does this, he will soon lose track of the amount of his credit balance,



No. 326 Date March 30, 1929 — AMOUNT
Pay to Wilcox & Company — $12 63
For Coal, one ton

No. 327 Date March 30, 1929
Pay to Gas Company — 1 58
For gas

No. 328 Date April 2 1929
Pay to Second National Bank — 42 64
For interest on note

Total — 56 85

Left-hand page

Date 1929		DEPOSITS:		
		Balance brot. forward.	128	39
Mar.	31	March Salary	150	00
Mar.	31	Interest on Liberty Bonds	12	50
April	2	Check from Anderson Co.	3	62
		Total Deposits.	294	51
		Deduct Checks Drawn Nos 326 – 328	56	85
		Balance forward.	237	66

Right-hand page

FIGURE 5. *One form of check book*

and may draw checks for an amount greater than he has in the bank. It is not good banking to permit depositors to overdraw, and consequently the

depositor who attempts the overdraft will very probably have his check refused and thereby injure his credit at the bank and with other persons who have anything to do with the check.

When all the checks in a book have been used, the bank supplies the depositor with a new one, and the final balance in the old book is carried forward to the new one.

17. Cashing checks. If a person to whom a check has been given desires cash for it, he hands it to the paying teller of the bank on which it is drawn after indorsing it, and receives his money. The teller pays the money at once if he knows the person, but he may think it best to look up the balance of the person who made the check or to require *identification* of the person who presents it. In order to avoid loss, the bank must be sure that the money is paid to the person for whom it was intended. Hence if the payee is not known at the bank his identification is always required. Identification may be made in a number of ways; but the usual way is by introduction of the payee by some responsible person who is known at the bank, or by the endorsement of the check by some responsible person whose signature is known. If neither of these ways is at the disposal of the payee, he must devise his own methods of satisfying the bank that he is the person to whom the money should be paid. Business houses that draw money for paying wages present not only a check for the total amount, but

May 16, 1929

THE NATIONAL BANK
OF THE REPUBLIC

PAY-ROLL WANTED

By Robinson Bros.

DENOMINATION	DOLLARS	CENTS
GOLD 5s		
" 10s		
" 20s		
CURRENCY 1s & 2s	100000	
" 5s	130000	
" 10s	30000	
" 20s	950000	
" 50s & 100s		
SILVER $1 s in $20 Rolls		
" 50c in $10 Rolls	9000	
" 25c in $10 Rolls	6000	
" 10c in $5 Rolls	3500	
NICKELS 5c in $2 Rolls	1000	
PENNIES 1c in 50c Rolls	500	
Total	1500000	

FIGURE 6. *Pay-roll slip*

also a slip like Figure 6, which shows the various denominations of coin and currency wanted.

18. How to write checks. Care should be taken in every instance in the writing of checks. They should always be written in ink—never with a pencil. Write the figures plainly, and fill in on the

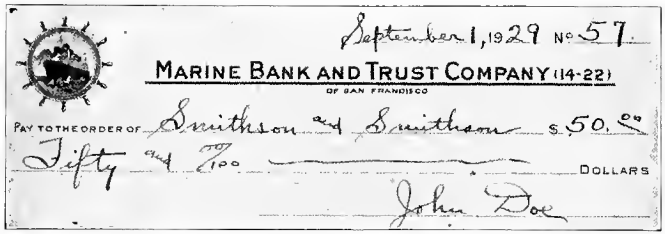

September 1, 1929 No 57
MARINE BANK AND TRUST COMPANY (14-22)
OF SAN FRANCISCO
PAY TO THE ORDER OF Smithson and Smithson $ 50.00
Fifty and 00/100 DOLLARS
John Doe

FIGURE 7. *An ordinary check*

"Dollars" line, writing the amount clearly, beginning at the extreme left of the check. Draw a heavy line through the unfilled space. (Fig. 7.)

The maker of a carelessly drawn check is responsible for any loss that results if the amount of his check is altered or raised and so paid by the bank. This rule is now so well established that it is the almost universal practice, among those using checks extensively, to use a *protectograph* as an additional precaution against the raising of checks. This is an instrument which cuts the amount into the check, and prints it with indelible ink.

When a check is made payable to one's self, it must be so indorsed, to indicate that the money has been received. When it is made payable to

"bearer," it may be cashed at the bank by anyone presenting it for payment, without responsibility to the bank except in case of forgery, in which case it is the bank's responsibility. It is the business of the bank to know the signatures of its customers, copies of which are always kept on file for ready reference in case of doubt.

When a check is payable to "order," it must be indorsed by the one to whom it is made payable. If such an "order" is paid by the bank to the wrong person, it is the bank's responsibility.

19. Certified checks. A *certified check* is a depositor's check on his bank, which has been certified as good by the bank upon which it is drawn. In other words, it is a check whose payment is guaranteed, by the bank, to anyone to whom the maker may indorse or transfer it. Such checks are a great convenience, and are extensively used in stock-exchange transactions or in other business where guarantee of payment is required before transfer of property is made.

20. Checks as vouchers. The meaning of *voucher*, as given in Webster, is: "A material thing which seems to attest an alleged act, especially in the receipt of money." A check, therefore, when properly indorsed by the payee, or payees, and canceled by the bank upon which it is drawn, is "vouched" for by the bank as having been paid to the proper person, and is therefore a receipt to the maker, or drawer, of the check for the money so

paid. The bank acts as agent for the drawer, and is responsible to him for the correct carrying out of his "order" as expressed in the check. Such service is of great utility and convenience to the depositor, enabling him to keep all his payments in order, and to file away his paid and canceled checks as receipts for money paid. The evidence as furnished by such paid and canceled checks has settled many disputes as to payment, and has frequently saved depositors the hardship of having to pay an amount twice.[1]

21. When a check is lost or stolen. When a check is lost or stolen, it is the duty of the maker of such check to notify the bank upon which it is drawn and have entered upon the bank's records a "stop-payment" order. A full description of the check in question should be given to the bank on which it is drawn, including the date, number, and amount, and the name of the person or persons to whom it was made payable. If payment is made by the bank after such "stop payment" has been ordered, it is the responsibility of the bank, and the bank's loss, if loss should arise. This is the usually accepted rule, though cases *might* arise where the courts might make a different ruling, as, for instance, where such check should fall into the hands of an innocent third party for value.

22. Indorsement. The *indorsement* of a check by the payee is his acknowledgment that he has received its value. The check may be transferred

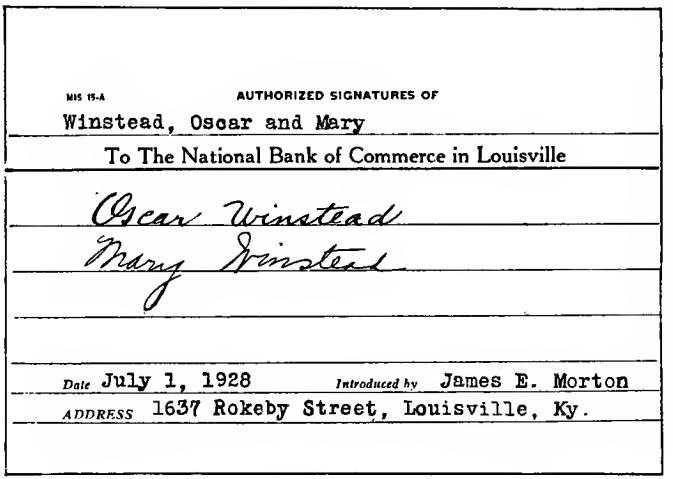
[1] For a complete study of this and similar matters, the student should consult the Negotiable Instruments Law.

by indorsement one or more times, but this is attended by risk, for promptness in cashing a check is essential. The payee should always present a check for payment promptly, and should such a check be drawn on a bank not in his own city, it should be deposited promptly with his bank for collection. Delay on his part in this particular may result in a loss to him if it should be dishonored by the bank on which it is drawn. The indorser of a check or note is likewise responsible for its ultimate payment.

23. A dishonored check or draft. A *dishonored check* or *draft* is one upon which payment is refused by the bank upon which it is drawn. (The words "check" and "draft" are frequently used synonymously. One's "check" on the bank is his "draft" on the bank for money.) In either case, if such instrument bears the indorsement of one or more persons, it should be protested for non-payment. The reason for such protest is to bind the indorsers legally. The meaning of *protest* is to declare formally that payment of a note, check, or draft has been duly demanded and refused.

When such an instrument is dishonored, it is the duty of the bank to hand the paper to a notary public for protest. The notary in turn protests the paper, and notifies all persons concerned, including the drawer, the drawee, and all the indorsers. If the collecting bank fails in its duty to have such paper protested, it may become liable for payment to the indorsers.

24. Signature card. After you have made your first deposit, and have received your pass book and check book, the teller will give you a *signature card* (Fig. 8), upon which you will sign your name. The teller then makes a record of the date upon which your account was opened, of the name of the


MIS 15-A AUTHORIZED SIGNATURES OF

Winstead, Oscar and Mary

To The National Bank of Commerce in Louisville

Oscar Winstead

Mary Winstead

Date July 1, 1928 Introduced by James E. Morton

ADDRESS 1637 Rokeby Street, Louisville, Ky.

FIGURE 8. *One form of signature card where a man and his wife have a joint account*

person who introduced you, of your address, and of your business; the card then becomes a part of the permanent records of the bank. The card is partly for your own protection, for if some one should forge your name to a check, the forgery might be discovered by a comparison of the signature on the check with that on your signature card.

Always sign your name to checks in exactly the same way you signed it on the signature card. For example, if your signature on the card is James W. Smith, never sign checks J. W. Smith, but always James W. Smith. When depositors have been careless about this matter, bank officers usually make polite requests to have only one form of signature used. A married woman should always sign her own given name in business transactions, especially with banks; for example, Caroline Smith, not Mrs. James Smith.

25. The work a check does. Your check on the bank (see Figs. 7 and 9) is your written order on the bank to pay and to charge against your deposit the amount of the check. To illustrate the convenience of checks, we will suppose you have bought of Peabody, Barnes & Company of Pittsburgh a bill of goods; and, being desirous of paying the account, you send them your check on your bank, in this case the Gate City National Bank of Atlanta.

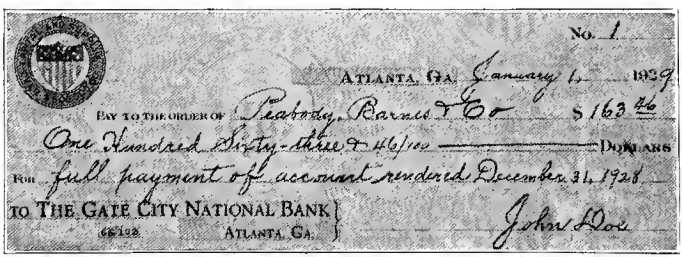

No. 1
Atlanta, Ga. January 1, 1929
Pay to the order of Peabody, Barnes & Co $163 46
One Hundred Sixty-three 46/100 Dollars
For full payment of account rendered December 31, 1928
To The Gate City National Bank
68-122 Atlanta, Ga.
John Doe

FIGURE 9. *To show the value of a check as a receipt*

Peabody, Barnes & Company will indorse the check and draw the money from their bank in

Pittsburgh, or perhaps receive credit for it there. The Pittsburgh bank will then collect the amount from your bank, and your bank will charge the amount against your deposit account. When your bank returns your paid and canceled check at the end of the month, with a statement of how your account stands, the check will bear the indorsement of Peabody, Barnes & Company, which is evidence to you that they have been paid. The check then becomes a receipt to you for the money.

26. The value of the check system. If you adopt the plan of paying all your accounts by issuing checks on your bank, at the end of the year you will have not only a record of all the money you have paid out, but also the year's receipts in a convenient form for filing. This record is the more valuable to you because it will show you how you have spent your money, and this may act as a restraint upon any tendency you may have to extravagance. The bank keeps the record for you without charge; it provides you with deposit slips and check books free, and relieves you of the responsibility and risk of handling the actual money.

While the bank makes no charge for the services just described, it is presumed that the depositor will at all times carry a credit balance in the bank large enough to justify the services rendered—and the bank is clearly entitled to this consideration.

Banks, as a rule, regularly analyze the individual accounts, in order to determine their respective

value. If such analysis shows an account to be of little value, the *credit* of that depositor may be greatly restricted at the bank. It is only right and natural that the bank's best credit facilities should be extended to its best and most profitable customers. Many unprofitable accounts are tolerated in banks for individual depositors in the hope that they will eventually become profitable, and it is clearly to the interest of the depositor to carry the best possible credit balances with his bank, if he expects the best possible service.

27. The depositor's monthly statement. At the end of each month banks usually make up a *statement* (Fig. 10) of each depositor's account, giving the amount and date of the payment of each check, the balance brought forward from the preceding month, the amount and date of each deposit, and the balance at the end of the month. On such a statement there is likely to be a printed notice to the depositor, telling him that the bank will not be responsible for the correction of errors unless notice is sent by a certain date, perhaps the middle of the month. It is therefore incumbent upon the depositor to check over all his deposits and withdrawals to see that no errors occur. It is to the credit of the banks, however, that mistakes seldom appear in their records. Bookkeeping is an exact science, the banks have a highly perfected system, and if errors occur they are searched for relentlessly before the day's business is closed.

IN ACCOUNT WITH

THE MIDLAND NATIONAL BANK

BLOOMINGTON, IND.

Please Examine at Once. If No Error Is Reported within Ten Days, the Account Will Be Considered Correct

LINE NO.	DATE	CHECKS	DATE	CHECKS	DATE	CHECKS	DATE	DEPOSITS
1	Jan. 8	$ 1.98			BALANCE		Jan. 1	$2,180.90
2	Jan. 8	33.18					Jan. 8	176.10
3	Jan. 9	87.20					Jan. 10	354.09
4	Jan. 13	127.67					Jan. 23	400.00
5	Jan. 23	8.56						
6	Jan. 23	10.00						
7	Jan. 26	13.45						
8	Jan. 28	98.23						
9	Jan. 28	.38						
10	Jan. 29	8.72						
11								
12								
13								
14								
15								
16								
17					BALANCE		Jan. 31	$2,721.72

ALWAYS EXAMINE YOUR CHECKS. PLEASE REPORT ANY ERRORS DIRECT TO AN OFFICIAL

FIGURE 10. *The depositor's monthly statement*

THE USE OF CERTIFICATES OF DEPOSIT

28. Certificates of deposit. *A certificate of deposit* is issued by the bank in case the depositor does not want to open an active checking account. It is therefore not subject to withdrawal by check, and will be paid by the bank, as stated on its face, only when it is returned properly indorsed. It is not entered on the pass book, because it carries on its face the evidence of money deposited.

29. Two kinds of certificates. Such certificates are usually issued by the bank in two ways. One way is to make them payable on demand, without interest, and without prior notice to the bank of the intention of the depositor to withdraw the money. Figure 11 shows a *demand certificate of deposit.*

The more common way, however, is to issue them payable with interest at a stipulated rate and for a specified time. The *interest-bearing certificate*

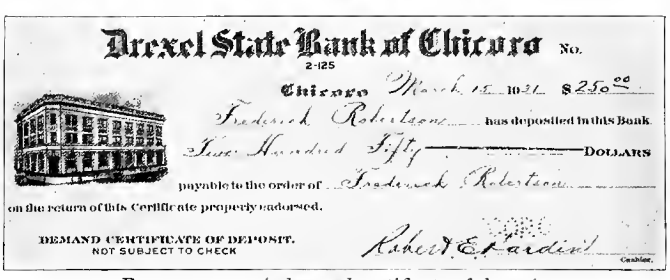

Drexel State Bank of Chicago No.
2-125
Chicago March 15 1921 $250.00
Frederick Robertson has deposited in this Bank
Two Hundred Fifty DOLLARS
payable to the order of Frederick Robertson
on the return of this Certificate properly endorsed.
DEMAND CERTIFICATE OF DEPOSIT.
NOT SUBJECT TO CHECK
Robert E. Gardiner
Cashier

FIGURE 11. *A demand certificate of deposit*

(Fig. 12) usually carries with it a reservation, on the part of the bank, requiring notice of, say, fifteen to

thirty days before the withdrawal of the money. But this reserved right is seldom, if ever, insisted

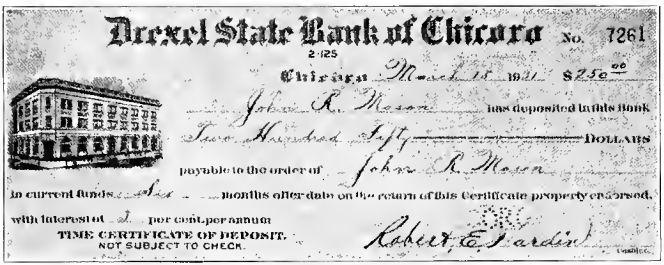

Drexel State Bank of Chicago No. 7261
2125
Chicago March 15 1921 $250.00
John R. Mason has deposited in this Bank
Two Hundred Fifty DOLLARS
payable to the order of John R. Mason
in current funds six months after date on the return of this Certificate properly endorsed,
with interest at 4 per cent. per annum
TIME CERTIFICATE OF DEPOSIT.
NOT SUBJECT TO CHECK.
Robert E. Gardiner
Cashier.

FIGURE 12. *An interest-bearing certificate of deposit*

upon by the bank, the certificates usually being paid without question when they are presented. No interest, however, is allowed, as a rule, if payment is asked before the specified time of deposit has expired.

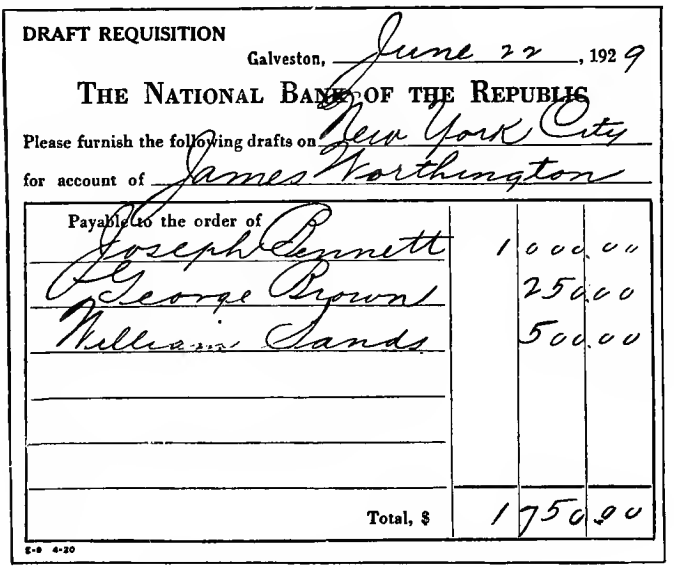
An interest-bearing certificate is a very convenient way of putting idle money to work and of educating one's self in the habit of saving.

DRAFTS

30. The work a draft does. A *draft* is an order directing the payment of a sum of money. A *draft* on a bank is usually called a *check*, but a draft on a firm or on an individual is never so called.

31. Banker's drafts. One kind of draft is a check of one bank on another bank in which it keeps money deposited. Such drafts are extensively used by banks generally throughout the country, and are drawn on their correspondent banks in the

reserve centers, such as New York, Chicago, Philadelphia, Boston, St. Louis, etc. They are called *banker's drafts*, and are used largely in clearances, or in adjusting balances between banks. Another important function of a banker's draft is found in its utility to travelers. As they usually pass at par throughout the country, they afford a convenient way of providing the traveler with ready money. Figure 13 shows one form of requisition in general use for ordering drafts.



DRAFT REQUISITION

Galveston, June 22, 1929

THE NATIONAL BANK OF THE REPUBLIC

Please furnish the following drafts on New York City

for account of James Worthington

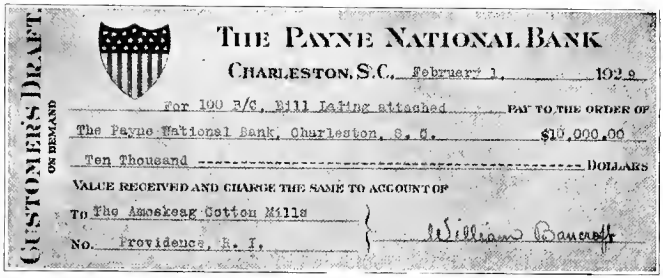
Payable to the order of			
Joseph Bennett	1	000	00
George Brown		250	00
William Sands		500	00
Total, $	1	750	00

E-8 4-20

FIGURE 13. *Requisition form for drafts*

Another kind of draft is a draft of one individual on another, or on a firm or corporation.

The work that such a draft does is well illustrated by Figure 14. William Bancroft is a cotton mer-


CUSTOMERS DRAFT
ON DEMAND

THE PAYNE NATIONAL BANK

CHARLESTON, S.C., February 1, 192 0

For 100 B/C, Bill lading attached PAY TO THE ORDER OF

The Payne National Bank, Charleston, S. C. $10,000.00

Ten Thousand ---------- DOLLARS

VALUE RECEIVED AND CHARGE THE SAME TO ACCOUNT OF

TO The Amoskeag Cotton Mills

No. Providence, R. I. William Bancroft

FIGURE 14. *A demand draft*

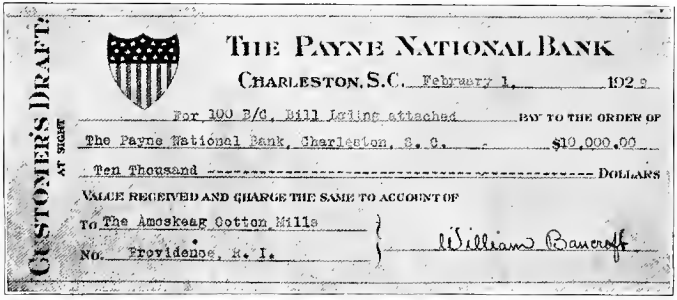
chant of Charleston, South Carolina, who has sold to the Amoskeag Cotton Mills of Providence, Rhode Island, one hundred bales of cotton and is making a draft for the money due him on the sale with a bill of lading attached to the draft (Fig. 14). His method of procedure is as follows: He delivers the cotton to the railroad company in his home town of Charleston, and gets a bill of lading from the agent. This bill of lading is the railroad's receipt for the cotton, and also its agreement to deliver it in Providence, as directed by Mr. Bancroft.

Mr. Bancroft now takes his bill of lading to his bank and pins it to a draft, drawn by himself in favor of the bank and on the Amoskeag Cotton Mills, for $10,000, which represents the amount for which the cotton was sold. The Charleston bank then forwards the draft and the bill of lading to a Providence bank for collection, after having given

Mr. Bancroft credit on its books for $10,000, less a small sum, perhaps $1.00 per thousand, for its services. This sum is called *exchange charges.*

The Providence bank then presents the draft and the bill of lading to the Amoskeag Cotton Mills, and, receiving payment, delivers to the mill both the draft and the bill of lading stamped "Paid." A representative of the mills now presents the bill of lading to the railroad company in Providence and gets the cotton. The Providence bank remits the money to Mr. Bancroft's bank in Charleston, and the transaction is closed to the safety and satisfaction of all concerned. If the draft is not paid promptly in Providence, an additional charge will be made to Mr. Bancroft covering the interest on the amount for the time consumed in its collection.

32. Sight drafts. A *sight draft* (Fig. 15) is a commercial instrument which may be employed by a


CUSTOMER'S DRAFT
AT SIGHT

THE PAYNE NATIONAL BANK

CHARLESTON, S.C. February 1, 192 2

For 100 B/C, Bill Lading attached PAY TO THE ORDER OF

The Payne National Bank, Charleston, S. C. $10,000.00

Ten Thousand ---------- DOLLARS

VALUE RECEIVED AND CHARGE THE SAME TO ACCOUNT OF

To The Amoskeag Cotton Mills

No. Providence, R. I.

William Bancroft

FIGURE 15. *A sight draft*

creditor as a means of facilitating the collection of money due from a debtor. Such drafts are rather

extensively used by wholesalers and jobbers in trade centers as a means of collecting accounts from merchants to whom they have sold goods, when the accounts for such goods have become due. A sight draft is very similar in form and in effect to the draft shown in Figure 14, by which Mr. Bancroft draws upon the Amoskeag Cotton Mills. It may be drawn with a bill of lading attached as described, or it may be drawn without a bill of lading, in which case it is merely an instrument used for the collection of bills and accounts due. The words "at sight" mean that the draft is to be paid when *it is seen* by, or presented to, the payer. It is therefore, in effect, a demand draft in all states except Massachusetts and Rhode Island. In these two states the payer of a sight draft is allowed three days of grace, after it has been presented to him, before payment may be demanded.

CREDIT AND HOW IT IS SECURED

33. The value of prompt dealing. If William Bancroft is known to his bank as a man who understands his business, if he is known as a man who is reliable and prompt in his dealings, the bank is not only glad to furnish him with the accommodation to expedite the handling of his business, as in the case just described, but it is equally willing to furnish him, if need be, with the greater part of the money to buy his cotton. It frequently happens, therefore, that a reliable man, even with small

capital, can conduct a large business with considerable profit to himself.

It cannot be too strongly emphasized, therefore, that promptness and a reputation for ability and reliability are essential in the struggle for success. William Bancroft may be a leaf-tobacco dealer, he may be a lumberman or a manufacturer, he may ship his merchandise to any part of the world where there are banking facilities; his home bank will convert his drafts into dollars, whether they be drawn on English customers in pounds sterling, French customers in francs, Italian customers in lire, or Japanese customers in yen.

34. Character and credit. *The basis of credit is character.* By *character* is meant not merely a development of the moral qualities. The word is used here in the sense implied in the preceding section—ability, reliability, good judgment, promptness in dealing, firmness in pursuing a safe business policy, and a habit of conducting business in an orderly manner. If a man has these qualities, he can frequently command all the credit he needs on his simple promise to pay, without other security than the faith that the bank has in him. The word "credit" is derived from a Latin word which means "belief," "faith," "truth."

It is most necessary, then, for a man to guard his credit. The testimony of the late J. Pierpont Morgan was to the effect that he had lent as much as a million dollars to a man without other security

than the faith he had in the man's ability and integrity.

35. Overdrawing an account. To illustrate one of the bad habits that tend to impair a bank's faith in its customers, consider the matter of *overdrawing an account*—that is, of giving a check for a sum greater than one's balance. If a depositor finds it necessary to do this, he is supposed to make arrangements previously for the accommodation; and if he fails to do so, his reputation at the bank immediately suffers. Once a new depositor at a city bank said to the teller, who was one of his personal friends, "What will you do if I overdraw my account?" The teller replied, "Don't do it." "But what will you do if I overdraw?" the depositor repeated. And again the teller replied, "Don't do it." The depositor was now a little impatient, and said, "You don't understand me. I asked you what you would do if I *did* overdraw my account." And the teller looked him straight in the eye and replied, "*Don't—do—it!*" And the episode was closed.

This illustrates the attitude of banks toward those who fail to transact business in a proper manner. The man who overdraws his account without having arranged the matter previously with the bank's officers, or the man who fails to meet his promises to pay when they are due, is not the man whom the bank is willing to help.

36. Security. It is plain, however, that the prudent banker cannot make loans altogether on

the basis of a man's credit if the sum desired is large in proportion to the borrower's total wealth, or if his business affairs are somewhat involved. Life is uncertain; misfortune sometimes overtakes the honest and reliable; the banker must not take a risk that would jeopardize the money left with him for safe-keeping. No man, therefore, should take offense when asked for *security.*

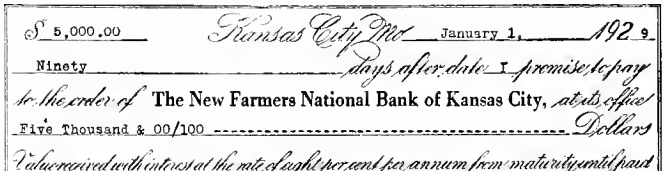
The security required by a bank may be personal, personal property, real estate, or collateral. *Personal security* is the joint obligation of some responsible person, or persons, with the maker of the obligation. *Personal-property security* may be such things as cotton, grain, cattle, merchandise, or manufactured products. *Real-estate security* is mortgages on houses and lands. *Collateral security* may be in stocks, bonds, notes, or other evidences of debt.

37. Making a note without security. A *note* is a written promise to pay a certain sum of money at a specified time.

Figure 16 illustrates the usual form of a note made by a person borrowing money with no other security than his personal responsibility. If the bank had not had confidence in the willingness and ability of Mr. Farnsworth, the maker of the note, to repay the amount borrowed, it would have required him to have some other responsible person sign the note with him, or to give one of the other forms of security.

It will be observed that the note is dated January 1, that it is payable April 1, and that it does not

begin to draw interest until it matures, that is, until April 1. Practically all notes drawn in favor of a bank are made in this way; that is, the interest does not begin to accrue until after the note becomes due. The reason is that the bank takes its interest when the note is made. This is called *discount*, or, more properly, *uncarned discount*, which will later



$ 5,000.00 Kansas City Mo January 1, 1929

Ninety days after date I promise to pay

to the order of **The New Farmers National Bank of Kansas City**, at its office

Five Thousand & 00/100 ---------- Dollars

Value received with interest at the rate of eight per cent per annum from maturity until paid

ALL PARTIES TO THIS INSTRUMENT HEREBY WAIVE DEMAND, PRESENTMENT PROTEST AND NOTICE OF PROTEST.

Due April 1, 1929 Anthony Farnsworth

No. 24732

FIGURE 16. *A personal note without security*

be explained in the sections on analyzing a bank statement. The note here illustrated runs for three months, and the discount charged Mr. Farnsworth, at 8 per cent, amounts to $100. He paid this on January 1, at the time he borrowed the money, and the bank gave him the equivalent, either in money or in credit on its books, for the balance, $4,900. In case the maker of the note fails to pay it at maturity, he must pay interest until he has paid or until the bank has accepted a renewal of the note.

38. Making a note with collateral. Figure 17 (pages 44–45) illustrates an assignment of collateral

Assignment of Collateral Security to Iron City National Bank

Pittsburgh, Pa., January 1, 1929

KNOW ALL MEN BY THESE PRESENTS, That I hereby assign, transfer and deliver to The Iron City National Bank, as collateral security for the payment of a note for $5,000 due ninety days from date, this day executed by the undersigned to the said Bank, as well as for the payment of any other liability or liabilities of the undersigned to the said Bank, due or to become due, whether now existing or hereafter arising, the following property, namely:

1 First Liberty Loan Coupon Bond No. x5786894 for	$1,000
1 First Mortgage Coupon Bond Monongahela R. R. No. 8964 . .	1,000
10 shares Capital Stock Ironton National Bank.	1,000
10 shares Preferred Stock American Tobacco Co.	1,000
10 shares Preferred Stock U. S. Steel Corporation	1,000
10 shares Bethlehem Steel Co.	1,000
Total	$6,000

of a market value estimated by the undersigned at $6,000; and the undersigned agrees to deliver to the said Bank on demand additional securities, or to make payments on account to its satisfaction, should the market value of said securities, as a whole, suffer any decline. Full power and authority is hereby given to the said Bank, its President or Cashier, to sell, assign and deliver the whole, or any part thereof, or any substitution therefor, or any additions thereto, at public or private sale, at the option of said Bank, or its President or Cashier on the non-payment of any of the liabilities above mentioned, or at any time or times thereafter, without advertisement or notice, which are expressly waived; and in the event of a sale, the said Bank may itself purchase the whole or any part of the property sold, free from any right or redemption on the part of the undersigned, which right is hereby waived and released. And in case of any sale, or collections from commercial paper, the said Bank may apply the net proceeds thereof to any one or more or all of the liabilities of the undersigned to the said Bank, as its President or Cashier shall deem proper, whether then due or not due, making proper rebate for interest on any liability not then due.

The said Bank is hereby authorized and empowered by the undersigned upon the non-payment of any liability above mentioned or upon the non-performance of any agreement herein contained, to appropriate to the payment of any one or more or all of the liabilities of the undersigned to the said Bank, any moneys of the undersigned in the possession of the said Bank, on deposit or otherwise.

Anthony Farnsworth

FIGURE 17. *Assignment of collateral to secure payment of a note*

to secure payment of a note. Mr. Farnsworth, either from necessity or from choice, has pledged to the bank various stocks and bonds as assurance to the bank that he will pay the note when it is due, April 1. If Mr. Farnsworth does not meet his note, the bank has the right to sell his stocks and bonds to reimburse itself.

The collateral offered by Mr. Farnsworth is mixed. It might have been all in Liberty Bonds, or all in any one of the stocks or bonds mentioned if the bank was satisfied with their value, or in good notes and mortgages which were due to him from others, or he might have pledged a sufficient amount of cotton, lumber, live stock, or manufactures of known value.

It will be noticed that the bank has taken $6,000 worth of security for the repayment of a $5,000 note. The reason for this is that the bank may be secured against loss in case of a shrinkage in the value of the collateral. Of course, if Mr. Farnsworth does not pay the note and the bank is compelled to sell the collateral, it will return to him the difference if the collateral sells for more than the debt.

39. Making a note with cotton as security. Figure 18 on pages 48–49 illustrates a note with cotton pledged as security for the repayment of the money. Mr. Buchannan, the maker of the note, is either a farmer or a cotton merchant. He needs money, and has cotton which he does not wish to sell, as the market conditions are unsatisfactory or the price is too

low to suit him. In order to get the money needed, he first takes his cotton to a storage warehouse, where it is weighed, graded, insured, and stored. He is then given *warehouse receipts* (see Fig. 19 on page 50), which he takes to his bank and attaches to his note, thus pledging the cotton for the repayment of the note. In this way he is able to hold his cotton for a better market and at the same time to get money for his immediate needs.

The bank does not advance the full value of the cotton for the reason that the price may go down before the note is paid, and there must be a margin to cover the possible loss.

Mr. Buchannan might have pledged corn, wheat, live stock, or other commodities of known and ready value as security for the payment of his note.

40. Why banks make short loans. Banks usually make loans for thirty, sixty, or ninety days, sometimes for four months, and rarely for six months. The reason for making short-time loans is that banking capital must be kept in as *liquid* a condition as possible, that is, *easily convertible into cash.* The money that a bank has belongs to its depositors, who are calling every day for it, either in whole or in part, and it is therefore necessary to have some of the loans coming due every day, or at least at frequent intervals. If a bank put its money out on long time, there would probably be difficulty in paying depositors, which would be ruinous to the bank's reputation for promptness.

$ $6,000 New Orleans, La., November 2, 1929

On the 1st *day of* January *1930, without grace,* I *promise to pay to the order of*

The Planters National Bank, of New Orleans, La.,

negotiable and payable at said Bank,

Six Thousand & 00/100 ---------- *DOLLARS,*

For value received, with interest from maturity at six per cent per annum until paid, and have pledged to said payee as collateral security

(100) One Hundred Bales of Cotton Marked "G.W.B." and stored with The Planters Storage Warehouse Company, Inc., Receipts for said cotton hereto attached, Numbers 1575 to 1674 inclusive

and do hereby agree that, whenever the total market value of the cotton represented by said warehouse receipts held as collateral security for this indebtedness of the undersigned to said holder shall be insufficient to cover the same, with ten per

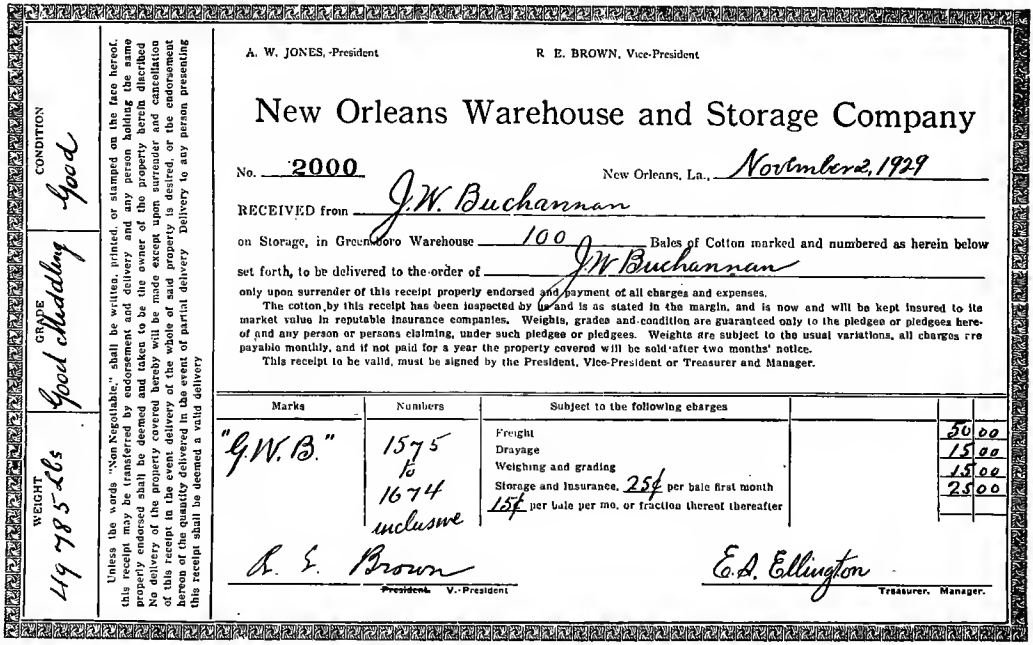
cent margin added thereto, to deposit with said holder immediately, upon demand, additional security to be approved by said holder, sufficient to cover the said amount and margin—the said additional security to be a collateral security to the same extent as the securities hereby pledged; and, in default of depositing the additional security, as above agreed, this note shall become instantly due and payable, precisely as though it had actually matured. Upon default of payment, when due, said holder is hereby authorized to sell, at any time or times thereafter, and without any previous demand or notice, the whole or any part of the said warehouse receipts or the cotton they represent, at either public or private sale, and to apply the proceeds thereof to the payment of such indebtedness or liability, with interest and costs, including ten per cent attorney's fees, the undersigned remaining responsible for any deficiency. At any sale made in accordance with the above agreement said holder is hereby authorized to become the purchaser and absolute owner of the securities sold, free from all trusts and claims.

Having pledged the foregoing as a basis for credit, I **hereby certify that the above described cotton is** my **own property and is free from any lien or encumbrance.**

All subscribers and endorsers hereby agree to continue and remain bound for the payment of this note, and all interest thereon, notwithstanding any extension of time that may be granted, and notwithstanding any failure or omission to present this note for payment, or to protest the same for dishonor, or to give notice of non-payment or dishonor or protest, hereby expressly waiving any presentment or demand for payment, and any protest, and any and all notice of any extension of time, or of non-payment or dishonor or protest in any form, or any other notice whatsoever.

J. W. Buchanan

FIGURE 18. *A note with cotton pledged as security*



A. W. JONES, President R. E. BROWN, Vice-President

New Orleans Warehouse and Storage Company

No. 2000 New Orleans, La., November 2, 1929

RECEIVED from J.W. Buchannan

on Storage, in Greensboro Warehouse 100 Bales of Cotton marked and numbered as herein below set forth, to be delivered to the order of J.W. Buchannan only upon surrender of this receipt properly endorsed and payment of all charges and expenses.

The cotton by this receipt has been inspected by us and is as stated in the margin, and is now and will be kept insured to its market value in reputable insurance companies. Weights, grades and condition are guaranteed only to the pledgee or pledgees hereof and any person or persons claiming under such pledgee or pledgees. Weights are subject to the usual variations, all charges are payable monthly, and if not paid for a year the property covered will be sold after two months' notice.

This receipt to be valid, must be signed by the President, Vice-President or Treasurer and Manager.

Marks	Numbers	Subject to the following charges		
"G.W.B."	1575 to 1674 inclusive	Freight		50 00
		Drayage		15 00
		Weighing and grading		15 00
		Storage and Insurance, 25¢ per bale first month		25 00
		15¢ per bale per mo. or fraction thereof thereafter		

R. E. Brown
~~President~~ V.-President

E.A. Ellington
Treasurer. Manager.

WEIGHT 49785 lbs

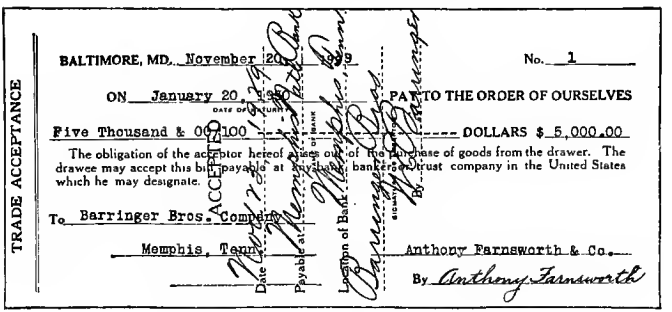
GRADE Good Middling

CONDITION Good

Unless the words "Non Negotiable," shall be written, printed, or stamped on the face hereof, this receipt may be transferred by endorsement and delivery and any person holding the same properly endorsed shall be deemed and taken to be the owner of the property herein discribed No delivery of the property covered hereby will be made except upon surrender and cancellation of this receipt in the event delivery of the whole of said property is desired, or the endorsement hereon of the quantity delivered in the event of partial delivery Delivery to any person presenting this receipt shall be deemed a valid delivery

FIGURE 19. *Warehouse receipt to accompany note in Figure 18*

41. A trade acceptance. A *trade acceptance* may be defined as a written acknowledgment of debt, by the buyer, in favor of the seller, for merchandise which the seller has placed in the hands of the buyer. It is a *negotiable instrument;* that is, a financial paper that may be used to obtain further credit.


TRADE ACCEPTANCE

BALTIMORE, MD. November 20, 1929 No. 1

ON January 20, 1930 PAY TO THE ORDER OF OURSELVES
DATE OF MATURITY

Five Thousand & 00/100 ---- DOLLARS $ 5,000.00

The obligation of the acceptor hereof arises out of the purchase of goods from the drawer. The drawee may accept this bill payable at any bank, banker's or trust company in the United States which he may designate.

To Barringer Bros. Company

Memphis, Tenn.

Anthony Farnsworth & Co.

By Anthony Farnsworth

ACCEPTED Nov. 23, 1929 Payable at Merchants Nat. Bank Memphis, Tenn. By Barringer Bros.

Date Payable at Location of Bank

FIGURE 20. *A trade acceptance*

As illustrated here (Fig. 20), Anthony Farnsworth & Company, of Baltimore, the sellers, have drawn a sixty-day draft on Barringer Brothers, of Memphis, the buyers, in the sum of $5,000, for goods sold to them. Barringer Brothers acknowledge the debt, in an *acceptance* of the draft, by writing their name across the face of it under the word "Accepted," indicating that they will pay the amount at their Memphis bank on the specified date, January 20, 1930.

This form of credit differs from the *open-book*, or charge account, only in that it gives the debt a negotiable value. It facilitates the business of

Anthony Farnsworth & Company because they are able to use this acceptance at their bank in Baltimore in obtaining credit, whereas they would find it difficult, and perhaps impossible, to use an open account against Barringer Brothers in procuring the credit needed.

The trade acceptance meets a long-felt want for the wholesale merchant and manufacturer, who need large sums of money to carry on their business, and who have been accustomed to sell their wares and merchandise on open accounts. There is some prejudice against it among the buyers, but this should, and doubtless will, be overcome, since it may readily be seen that whatever legitimate instrument eases the credit situation for the seller will also benefit the buyer. Indeed, according to the opinion of the governor of one of the Federal Reserve Banks, the signing of an acceptance by the debtor increases his financial standing, because it shows prompt paying methods.

USAGE AMONG TRAVELERS

42. Letters of credit. A *letter of credit* is a letter of notification addressed by a banker to one or more of his correspondents certifying that the person named therein is entitled to draw on him or his credit up to a certain sum. Letters of credit are usually issued to travelers going to distant parts, where credit among strangers is arranged for by the letters themselves.

43. Travelers' Checks. A late development in banking, and one of great convenience to the traveling public, are *Travelers' Checks*. Their unique feature is that they may be cashed in any part of the world without any other identification of the traveler than that supplied by the check itself. The simple device of signing his own name in the presence of the person from whom he wishes to get the money is all the identification the traveler needs. These checks are cashed without question by banks, hotels, merchants, and railroad and steamship agents everywhere, so that the traveler is put to no inconvenience whatever for funds. All this is possible because the checks are issued under the auspices of the American Bankers Association, and are guaranteed by the Bankers Trust Company, of New York City. Foreigners who cash such checks may not know the individual American banks which issued them, but they do know these two powerful institutions, and have perfect confidence that the checks are good.

44. Travelers' Checks illustrated. In the illustration here shown (Fig. 21, page 54), Mr. Alex Devereaux is the traveler. By dint of application to his business and correct methods of procedure he has accumulated enough money to take a vacation, and decides to go abroad. He goes to his home bank—in this case the Old Dominion Bank of Norfolk, Virginia—and buys a book of Travelers' Checks in denominations to suit his purposes. On

each check purchased, he signs his name on the line provided for that purpose in the presence of the cashier.

Later Mr. Devereaux is in Paris, and finds himself in need of French money, and so he makes one of his checks payable to the order of his hotel; for instance, the Hotel Continental. He now signs his name, in the presence of the hotel cashier or the proprietor, under the word "Countersignature," as

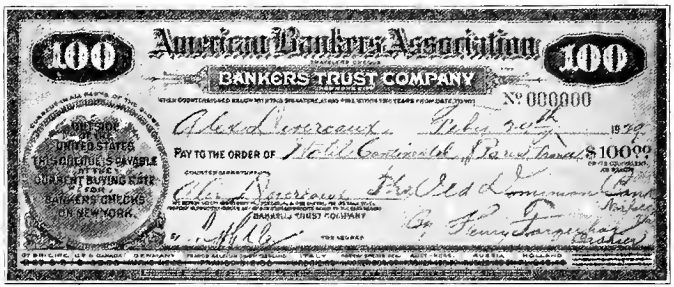


FIGURE 21. *A Traveler's Check*

indicated in the check. The two signatures—the one he made in Norfolk and the one he makes in Paris—being identical, he is thus known as Alex Devereaux, and the value of his check is paid to him. For his fifty dollars paid to the bank in Norfolk he would receive in Paris, Rome, Petrograd, London, or Berlin an equivalent based upon the *exchange quotations* for francs, lire, rubles, pounds, or marks. [See daily papers for exchange quotations.]

In like manner Mr. Devereaux may travel to Cairo or to Cape Town; he may go to Melbourne, Shanghai, or Calcutta; or his fancy may take him to

Constantinople or Jerusalem—no matter where he goes, whether to important cities or to unimportant places on the world's surface, his Travelers' Checks[1] will stand him in good stead, and may be redeemed in pounds, shillings, and pence, as indicated on their face.

45. London exchange of first rank. As English commerce reaches throughout the length and breadth of civilization, London has been, until recently, the most important financial center of the world. For this reason, English money, or "London Exchange," has been of greater utility in many places than francs, rubles, marks, or dollars. The important position occupied by London in this respect is now disputed by New York. At the present time "dollar exchange" is selling at a premium in nearly all foreign countries, and it is believed that (with the growth of our Federal Reserve System, which will be treated later) dollar exchange will continue to be of more utility than exchange drawn on London in pounds sterling.

Questions for Discussion

1. Describe the opening of a bank account.
2. Why is it necessary to use care in making out a deposit slip?
3. How do banks handle out-of-town checks?

[1] Travelers' Checks similar to the one here shown are issued by many of the large banks of New York, Philadelphia, Chicago, Boston, and other cities having foreign connections, and are placed on sale with their corresponding banks throughout the United States, so that these checks may usually be purchased in every banking town or city of America.

4. Study Figure 3 carefully and determine why it is arranged as it is.

5. Explain the check book. Mention several reasons for its being a convenience.

6. Explain why the blank form illustrated in Figure 6 is a convenience.

7. What care is necessary in writing checks?

8. Rule some forms like Figure 7 and write checks payable to yourself, to bearer, and to the order of other persons.

9. Under what circumstances is a certified check used?

10. Explain how a check is a voucher. Sometimes a man writes on the check the nature of the debt for which he gives it. Why?

11. What is a stop-payment order?

12. Explain the nature and the purpose of an indorsement.

13. Why is a check ever dishonored?

14. What is the purpose of the signature card? How should the depositor sign his name?

15. Trace the work of a check you might send to Detroit in payment for a motor car.

16. Show how a checking account is a record of expenditures.

17. How do certificates of deposits differ from ordinary checking accounts?

18. Trace the work of a draft you might make if you had some sort of merchandise to sell in a distant city.

19. What is exchange?

20. What kind of customers do banks like to have? Why?

21. Why is it not a good policy to overdraw an account?

22. Explain the nature of security. May one borrow without it?

23. What is unearned discount?

24. Tell what collateral a man in your town or community might give in making a loan at a bank.

25. Why do bank loans run for short periods of time? What is meant by keeping resources "liquid"?

26. Explain why a trade acceptance is called a negotiable instrument. Devise an example of a trade acceptance.

27. What is a letter of credit?

28. Mention a number of uses which a traveler from this country might make of his Travelers' Checks if he were to travel to England. If he took $2,000 with him on his journey, what would be the equivalent in English money? In French money? In Italian money? [See daily papers.]

29. Investigate by independent research the full significance of an indorsement of commercial paper.

30. Why is it an advantage to make all financial transactions through a bank?

CHAPTER III

BANKS AND BANKING

THE DEVELOPMENT OF BANKS

46. The earliest banks. Banks are very ancient institutions, the first on record being that of Egibi and Sons of the ancient city of Babylon, six hundred to seven hundred years before the birth of Christ. The records of that distant time are not very full, and it is not known how nearly the business of this bank corresponded to that of modern banks, but it is certain that important loan, exchange, and other financial business was carried on. About the year 1000 the Chinese, who had a very ancient civilization, understood the use of paper money and had a *bank of issue;* that is, a bank which issues its own notes payable to bearer. Ancient Greece carried on an extensive commerce about the shores of the Mediterranean Sea, and had banks which received deposits at interest and issued letters of credit. Venice, one of the most prosperous centers of commerce, had an important bank in the thirteenth century, and Barcelona had one very early in the fifteenth. The first bank of issue in Western Europe was at Stockholm.

47. Origin of banks. As the practice of banking began so long ago, it is clear that it grew out of

human needs. "Necessity," we are often told, "is the mother of invention." Consider the situation in one of those ancient centers of trade, like Babylon, or Athens, or Venice, or Genoa, or Amsterdam, or London. As they carried on trade with all parts of the world to which ships and caravans could go, they had to take the money of many nations. It is so in our modern world. Our own country has a decimal system of money, issuing dollars, half-dollars, quarters, dimes, etc., while England issues pounds, shillings, etc., France issues francs, etc., Germany issues marks and pfennigs, and so on throughout the world. In our trade with other nations it is necessary to find out how many dollars and cents an English pound is worth at any given time, and how many cents are the equivalent of a shilling, a franc, or a mark. In ancient days there was the same problem, but it was probably more difficult, for all countries did not make their coin of uniform degrees of fineness. There grew up companies of men whose business it was to exchange the coin of one country for that of another, so that when a merchant sold or bought a quantity of goods he was sure that he was getting or giving the proper amount of money. A fee was charged by the persons who made the exchange; and thus a banking activity was begun.

48. Development of banking. When a start had been made, the business of banking developed naturally, according to the needs of the time. A good example is the history of the bank of Amsterdam.

At first it merely exchanged the money of one country for that of another, taking its fee as described above; but it afterward enlarged its function by accepting coin or bullion[1] on deposit for safe-keeping and allowing its depositors to withdraw it whenever they pleased. Then another forward step was made: if two men of business engaged in a transaction which required the payment of a large sum of money, the bank merely transferred the credit from one of the men to the other, thus avoiding the actual transfer of cash. The paper slips which recorded the transfer were called *bank money*, and the bank was supposed to have in its strong boxes at all times as much coin or bullion as it had outstanding bank money. Still another step forward was made when the bank broke this rule by extending loans to people who needed money for carrying on or extending their business. For every service of the kinds mentioned above, the banks charged a fee, and thus made their business profitable to themselves as well as serviceable to their customers.

49. Classification of financial institutions. Under modern conditions a great expansion of banking has taken place, with increasing specialization of the banking functions. The creation of new types of investments has brought into the banking field trust companies, and the need of thrift has stimulated the

[1] *Bullion* is uncoined gold or silver in the shape of bars, ingots, etc. Much of the gold held in the United States Treasury is in the form of bullion, or uncoined metal.

growth of savings banks and building and loan associations. For the sake of keeping these in mind the different financial institutions may be grouped into commercial banks, savings institutions, and investment companies. (1) The commercial banks are, broadly speaking, national, state, and private; (2) the savings institutions are savings banks, building and loan associations, and postal savings banks; (3) the investment companies are numerous, but among them are trust companies and the land banks organized under state and national law. All of these institutions must have, before they can engage in business, what is called a charter. It is also desirable to learn a little something about the ownership of the bank.

THE BANKING BUSINESS

50. Charters. First, however, it will be necessary to consider the value of *charters*, not only to banks, but to other kinds of business. For example, the purpose of a manufacturing corporation in securing a charter is primarily to limit the responsibility or liability of the owners or shareholders. Another important reason is that a large business requires more money to conduct its affairs than can be supplied by an individual or a partnership. Hence the need of a chartered corporation in which there are many partners or shareholders to supply the money needed.

For example, a large cotton mill may be needed in a community to use the cotton supply. A number

of persons may conclude that such a business may be a paying investment, and they therefore pool their money as stockholders in a corporation to establish a mill, and obtain from the state a charter which defines their powers and financial responsibilities. Their charter limits their liability to just the amount of interest they buy in the business. That is, a man who owns ten thousand dollars worth of stock cannot be required to pay more than the full paid-up amount of this stock toward the debts of the mill if it proves a failure. Owners of corporation stock are more fortunate than owners of bank stock in this respect, for the latter, as will be seen later, are liable in nearly all cases for an additional amount equal to the amount of stock owned.

51. Bank stock. The *capital stock* of a bank is the amount of money paid into its treasury by the shareholders. It is the bank's permanent fund, and cannot be withdrawn by the stockholders, but remains as a guarantee to depositors against loss as long as the business continues. In some cases a *surplus* is also paid into the treasury; the effect of this is to give greater security to the bank's depositors, and an added value to the stock itself. The strength of a bank, therefore, is usually measured by the amount of its combined capital, surplus, and undivided profits, though some of the smaller banks are so well managed that they are as safe as the larger ones.

52. A certificate of stock. Let us suppose there is a Lake Shore Trust and Savings Bank of Lakeside,

NUMBER
15
INCORPORATED UNDER THE LAWS OF THE STATE OF INDIANA
SHARES
30
Lake Shore Trust and Savings Bank
CAPITAL $300,000.00
SHARES $100.00
THIS CERTIFIES THAT Andrew Farnsworth is the owner of
Thirty Shares of the Capital Stock of
Lake Shore Trust and Savings Bank, of the par value of ONE HUNDRED DOLLARS each fully
paid transferable only on the Books of the Bank in person or by Attorney in the
surrender of this Certificate
IN WITNESS WHEREOF, the President and Cashier have hereunto subscribed their names and
caused the Seal of the Bank to be hereunto affixed at Lakeside, Ind. this 5th day of
March A.D. 1931
John Henning CASHIER
Peter Wellingford PRESIDENT

FIGURE 22. *A certificate of bank stock*

Indiana. Figure 22 illustrates a *certificate of stock* in that bank. It signifies that Andrew Farnsworth owns thirty shares of stock and that each share is worth $100. It signifies also that there are, altogether,

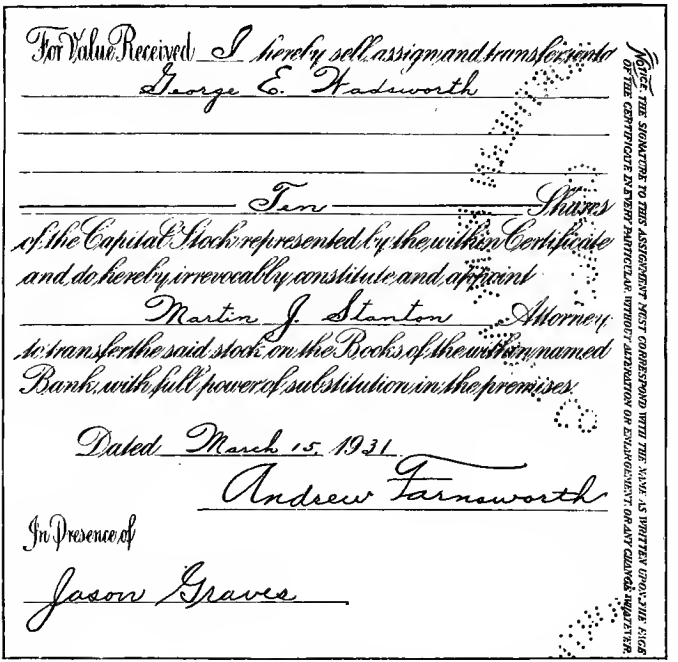

For Value Received I hereby sell assign and transfer unto
George E. Wadsworth
Ten Shares
of the Capital Stock represented by the within Certificate
and do hereby irrevocably constitute and appoint
Martin J. Stanton Attorney
to transfer the said stock on the Books of the within named
Bank with full power of substitution in the premises.
Dated March 15 1931
Andrew Farnsworth
In Presence of
Jason Graves
NOTICE: THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATEVER.

FIGURE 23. *Form of transfer for bank stock*

3,000 such shares, making the whole capital stock of the bank $300,000, that the stock is fully paid, and that it can be transferred from one person to another on the books of the bank only when it is presented "in

person or by attorney." Figure 23 shows the form of transfer appearing on the back of the stock certificate.

The fact that Mr. Farnsworth owns but thirty shares makes it apparent that the small investor finds bank stock attractive. He might have bought fifty or a hundred shares if he had had the money and the inclination, but his three thousand dollars was very acceptable to the organizers of the bank. In fact, it is an advantage to have many small holders of stock, because they are likely to have a keen interest in the bank's affairs and to bring it as much business as possible. It is true, too, that few investments are more secure or profitable either to large or to small investors.

53. A bank's chief business. The bank's charter having been procured, its stockholders having paid in its capital, and the directors and officers having been elected, the doors are opened for the patronage of the public. Its chief business is to receive money or its equivalent on deposit, to pay checks at the convenience of depositors, and to lend its money to worthy men and corporations upon satisfactory collateral or other security. It is the tacit agreement between the bank and its depositors that the former may lend the money the latter leave on deposit, and the interest from the loans is the main source of profit. Another source of profit is the making of collections for the public and for other banks, though the revenue from the collection department is now small owing to the work of the

Federal Reserve Banks, which allow no exchange charges to the remitting member bank.

54. Organization and administration of banks. After a group of men have determined to organize a bank, they agree as to the amount of capital to be invested and secure a charter from the state or national authorities. Then, as stockholders, they come together in a meeting, fix the duties and responsibilities of each officer, elect directors, and otherwise adopt regulations for the conduct of the bank. If they are establishing a national bank, upon application, the Comptroller of the Currency will provide them with a set of by-laws, which may be amended from time to time as seems expedient to the shareholders, provided, however, that the amendments are within the law regulating national banks.

After the stockholders' meeting the newly elected directors meet and elect a president, a vice-president, a cashier, an assistant cashier, and a teller, or as many other assistants as may be required to carry on the business in an orderly manner. The directors have entire control of the bank and are responsible for the safe and orderly conduct of the bank's business. While legally they are the real managers of the bank, in actual practice it frequently happens that they act more in the capacity of an advisory board than as a directing board. The officers are in daily contact with the business and are more familiar with affairs in detail; their judgment is therefore generally deferred to by the board.

It is the duty of the directors to have general supervision of the bank. They should attend every board meeting and become acquainted with all the loans and investments; they should see that the books are neatly and correctly kept, and to this end have proper examinations made periodically; each director has a right to inspect the books, and at least three must *attest*—that is, certify to the correctness of—these periodic reports. Failure in the performance of their duties, in case of trouble in the affairs of a national bank, may subject the directors to prosecution on the part of the Comptroller of the Currency.

The position of director is therefore important and responsible, and a man is chosen for it because of his wisdom in business matters and for his influence in drawing business to the bank. Directors are elected annually by the stockholders, who are the owners of the bank; and members of the board of directors may be removed and others chosen in their places at any annual meeting of the stockholders.

CLASSIFICATION OF BANKS

55. National banks. While state and savings banks are organized under the laws of the different states, our *national banks*, as their name indicates, are organized under the laws of the United States government and come under the direct supervision of the Comptroller of the Currency, who provides all printed forms and fully detailed instructions for

organization. Although the solvency of banks is not guaranteed by the states or the federal government from which they get their charters, there are bank examinations by authorized examiners, and, in case of insolvency or unsound condition, a receiver may be appointed and the affairs of the bank wound up. Shareholders of all national banks are liable for an additional assessment equal to the amount of the par value of their stock. Besides, there is another safeguard which will be mentioned later.

The smallest capital allowed for organization of a national bank is $25,000, and the fewest number of organizers is five. There is no maximum limit in these particulars. At the present time the largest national banks in the country are the National City Bank of New York, with $104,033,287.87 capital, surplus, and undivided profits; the Continental and Commercial National Bank of Chicago, with $44,990,609.58; and the National Bank of Commerce, New York, with $57,665,708.70. The stock of all three is distributed among many persons.

56. National bank statistics. The Comptroller of the Currency publishes an annual report regarding national banks from which much of interest can be learned. For example, reference to it will disclose the following facts: that in 1919 there were 7,762 national banks in the United States, that they had a capital of $1,115,507,000, that they had a surplus of $869,457,000, that they paid $135,588,000 in *dividends* (that portion of earnings set aside for

payment to the stockholders on their investment in the shares of the capital stock of the bank), that their net earnings were $299,980,000, and that the ratio of their dividends to their capital was 11.81. Students of banking would do well to consult this valuable report. It is to be found in many libraries and banks, and may be secured from the Director of Public Documents, Washington, D.C., for a small price.

57. National bank currency. A national bank has still another source of profit—it may issue its own notes, guaranteed by the United States, up to the full extent of its paid-in capital stock. The process by which this is accomplished is as follows: If the bank's capital is $100,000 and it wishes to issue that sum in currency, or money, one of its authorized officers will buy on the open market $100,000 worth of United States bonds. These bonds are then deposited with the Treasurer of the United States, and he issues to the bank $100,000 of currency with the bank's own imprint thereon. The government guarantees the soundness of this money and holds the United States bonds to secure itself.

58. Banks as executors, etc. National banks are now permitted, under the authority of the Federal Reserve Act, to act in the capacity of guardian, administrator, executor, and trustee; and many of them are beginning to take up this branch of business for the additional profit afforded.

59. State banks. A group of men wishing to form a *state bank* must apply to the government of

the state in which they live for a charter, must organize in accordance with its provisions, and must transact business according to the law. While the laws in regard to this type of banking institution differ somewhat in the various states, provision is usually made for their safe conduct. State banks occupy a distinct and important position of usefulness in the field of banking, and they enjoy some privileges not accorded to national banks. Nearly all the states have now made provision for the safe conduct of their state banks, tending more and more to make them as safe as the national banks.

Stringent laws have been made, with provisions to regulate, examine, and supervise their affairs, and in seventeen states[1] shareholders have been made to assume the same liability as that attaching to the shareholders of national banks, that is, an additional amount of liability equal to the full amount of their holdings in the stock of the bank.

The laws of New Mexico are elaborate; those of Illinois are comprehensive; while those of Arizona, Colorado, Georgia, Indiana, Iowa, Kansas, Kentucky, Maryland, Minnesota, New Jersey, North Carolina, Oklahoma, Pennsylvania, South Carolina, Utah, Washington, West Virginia, and Wisconsin are excellent and entirely adequate, adapted to the needs of the localities in which they are located. It would, of course,

[1] The states in which this law applies are Arizona, Colorado, Georgia, Indiana, Pennsylvania, Illinois, Iowa, Kansas, Kentucky, Minnesota, Oklahoma, North Carolina, South Carolina, Utah, Washington, West Virginia, and Wisconsin. All national bank shareholders are subject to double liability in case of failure of the bank.

be impracticable to give a digest of the laws of the different states regulating the affairs of their banks, differing as they do in many particulars, and likely to change from time to time, but it would be interesting to the student to look up such laws in his own state.

The importance of state banks may be realized when it is known that there are approximately twenty thousand state institutions (state banks, savings banks, and trust companies), holding probably half the deposits of the United States.

Restrictions in the national bank law as to farm loans and mortgages on real estate lessen the value of national banks in the smaller communities, and they are sufficient reasons for the continuing importance of the state banks. In some localities they outnumber the national banks greatly both in number and in importance. For example, in the state of Wisconsin there are 825 state banks and only 175 national banks. In that state 80 per cent of local needs are cared for by the state banks.

It should be remembered, too, that state banks are privileged to join the Federal Reserve Association, and many of them have availed themselves of that privilege.

60. Private banks. *Private banks* are usually owned and carried on by a partnership of two or more persons, though sometimes by one person alone, and without any other capital than the individual responsibility of the owners or owner, whose entire property is liable for the debts of the business. The death

of a partner in a partnership, or of an individual who is doing business alone, seriously interferes with the continuance of the business. This difficulty is avoided by the formation of a corporation. It will readily be seen that private banks as a general rule are by no means so secure as chartered banks (though there have been and are notable exceptions), for the latter, while they do not have the actual financial backing of the government, yet do have its moral support, and are under government supervision. Of late years there have been efforts in some states to put private banks under legal control, and this matter is still being agitated. It may be said in general of private banks that their security depends upon three things: the owners' wealth, their honesty, and a thoroughly conservative policy. Many private bankers have failed and brought disaster upon their communities because they could not say *No* to personal friends seeking loans when their security was not ample. This mistake is not so likely to happen in the case of banks whose lending power is governed by law. The tendency is to abolish private banks, and eventually this may be done. The state of Illinois practically abolished private banks in 1921.

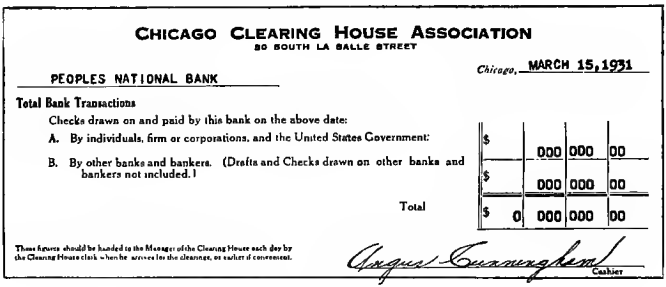
CLEARING HOUSES

61. Functions of clearing houses. Associating themselves for the purpose of exchanging the checks drawn on one another, the banks in many cities have created what is called a *clearing house*. Everyone

who handles checks knows that a check drawn upon one bank may be cashed or deposited in any other bank in the same city and, unless some reason to the contrary appears, in banks in other cities. As every city bank finds at the close of the day's business that it holds a number of checks drawn on the other banks of the same city which have to be presented for payment at the counters of the banks on which they are drawn, the inconvenience of sending messengers from bank to bank is avoided by having the messengers meet at one place, exchange checks, and later meet again and pay in money the balances resulting from the exchange. As early as 1831 Albert Gallatin, one of the founders of our Republic, urged the establishment of clearing houses to accomplish this purpose; but it was not until 1853 that this aid to the banking business was adopted. At the present time there are clearing houses in most, if not all, of the larger cities.

62. Advantages of clearing houses. The method by which such institutions work is, in general, easily understood, though the details of their management is a business in itself and need not be described here. It is enough to say that every bank sends to the clearing house all the checks it has cashed or received on deposit payable at the other banks in the same city, and receives in exchange all the checks payable by it which the other banks have cashed or received on deposit; and that any bank receives a cash balance if it has paid out more

money for other banks than all other banks have paid out for it, but pays a cash balance if it has paid out less than other banks have paid out for it. This arrangement saves a great amount of time and trouble besides avoiding the transfer of large amounts of cash. It is said that it is quite possible to settle one day's business of $100,000,000 by the exchange of only $5,000,000 actual money. In nearly all cities in which are located Federal



CHICAGO CLEARING HOUSE ASSOCIATION
80 SOUTH LA SALLE STREET

Chicago, MARCH 15, 1931

PEOPLES NATIONAL BANK

Total Bank Transactions

Checks drawn on and paid by this bank on the above date:

A. By individuals, firm or corporations, and the United States Government:	$	000	000	00
B. By other banks and bankers. (Drafts and Checks drawn on other banks and bankers not included.)	$	000	000	00
Total	$ 0	000	000	00

These figures should be handed to the Manager of the Clearing House each day by the Clearing House clerk when he arrives for the clearings, or earlier if convenient.

August Cunningham
Cashier

FIGURE 24. *A clearing-house check*

Reserve Banks, or branches of such banks, clearing-house balances are now settled by credits to, or debits against, members' balances in that bank and without the use of actual money in such settlement. Figure 24 shows a clearing-house check.

63. Volume of clearing-house business. Since the volume of business done by the clearing houses of the United States roughly indicates the state of business activities, figures are carefully compiled and published. Thus, the clearings of the Chicago banks alone for the year 1919 were $29,685,973,091.

This does not mean that there was so much cash in Chicago, nor that so much actual money changed hands, for the total amount of metal and paper money in the whole United States was not a tithe of this great sum, but rather that so much business was made possible by means of banks and the credit system. Merchants, manufacturers, brokers, bankers, all scan clearing-house reports as a part of their day's work, and their transactions are often influenced by their interpretation of what they read.

INSTITUTIONS FOR ENCOURAGING SAVING

64. Savings banks. Like state banks, *savings banks* get their charters from the states in which they are established, must transact business according to law, are subject to examinations by legally appointed officers and to closure if unsuccessful, and their stockholders in many cases are liable for an additional amount equal to the amount of their holdings of stock.

Frequently this type of bank is organized as a *mutual* concern. The depositors are the owners, and the expenses are paid from earnings and the balance distributed to depositors as interest. The New York law does not permit any other type of savings bank. The stock savings banks have a capital and are owned by the stockholders. The depositors receive a fixed rate of interest. The savings bank may make mortgage loans and buy securities, but does not carry on, as a usual thing, a commercial banking business.

Many regular commercial banks have savings departments and conduct them for profit; but the original idea behind the establishment of savings banks was educational. It has long been recognized that thrift has a strong influence in making for

The first savings bank, founded by Henry Duncan, Ruthwell Village, Scotland, in the year 1810

security and stability in a nation, and also that many people have to be encouraged to lay aside a part of their earnings. Under this principle many savings banks offer special facilities to their depositors by paying to them the full earnings less an amount that the directors consider necessary to the establishment of a sinking fund, and the banks are

located where they will be convenient to the depositors, as in a manufacturing district of a city.

65. Growth of savings banks. Statistics are available giving the amount of deposits in savings banks since the year 1820. In that year ten banks had 8,635 depositors, who had deposits to the amount of $1,138,576, which gives an average of $131.86 for each person. In 1900, 1,002 banks had 6,107,083 depositors, who had deposits to the amount of $2,449,547,885, which is an average of $401.10 for each person. In 1918, 1,819 banks had 11,379,553 depositors, who had deposits to the amount of $5,471,589,948, which is an average of $466.94 for each person. These figures plainly indicate that Americans are gaining in the practice of thrift.

66. Building and loan associations. *Building and loan associations* are a type of organization, operating under state laws, for lending and borrowing outside of the regular banking business, and are very popular all over the country. They are sometimes called *coöperative banks*. A group of men who wish to establish such an association meet, elect their directors and other officers, and subscribe stock to be paid for at regular intervals, say weekly or monthly. One man takes one share, perhaps, which obligates him to pay twenty-five cents, or one dollar, or ten dollars, a month, according to the agreement. Another man may take two shares, or as many more as he desires. He must, however,

meet his obligations, and usually is fined if he does not; if he wishes to withdraw, he may do so by giving due notice, and get back his money with interest; but so long as he is a member he must keep up his *dues*, or payments, which are really loans to the association. After a certain time, perhaps a year, a new series of loans, or dues, is begun; and in this way money is gradually accumulated.

When a certain amount of money is on hand, it is lent to one of the members to use in some way that will give a definite asset to the association, probably in the building of a house. If more than one person wants to borrow the sum, there is likely to be a sort of auction, the money going to the highest bidder. The person who borrows continues to pay his dues as before, and in the end has saved enough money to pay for his house.

After a certain number of years the first series *pays out;* that is, the association has made for each stockholder the amount that he originally set out to save, say one thousand dollars, for example. This sum is more than he has paid into the treasury, for it includes the interest that his savings have earned, and his saving has thus been a source of profit to him.

By this process of borrowing and lending, one man has built himself a home, while another has accumulated an amount of cash.

The total number of members of building and loan associations on January 1, 1918, was 3,838,612;

and the total assets of the associations were $1,769,142,175.

67. Advantages and disadvantages of building and loan associations. A building and loan association has very little overhead expense. The secretary is usually the only person who receives a salary, and as he often carries on his work for the building and loan association in connection with some other business, such as selling insurance, his salary is not likely to be large. The directors and other officers serve without payment, and attorneys' fees are usually paid by the borrowers. Rent, too, is likely to be low for the same reason that the secretary's salary is low, because of the combination of business interests.

On the other hand, anyone who joins an association must keep up his payments whether it is convenient or not, while if he puts his money in a bank he can do so altogether at his convenience. Further, a good many loan associations have failed because the laws regarding their operation have been lax.

Finally, it may be said that organizations of this sort tend to assume more and more the character of savings banks.

68. Postal savings system. The panic of 1907 somewhat shook the confidence of the people in the banks, and two remedial efforts were made. In this same year Oklahoma passed a law guaranteeing bank deposits, and later some of the other states did likewise. For some time there had been an

agitation to have the United States government establish *postal savings*, using the post offices for that purpose. It was thought that the equipment of post offices for that purpose was too meager, but nevertheless a bill was introduced into Congress, was passed, and was signed by President Taft in June, 1910. Since then savings have been deposited with postmasters, especially in small towns where there are no savings or other banks; the total deposits at the end of the fiscal year ending June 30, 1919, were $136,838,361.

69. Trust companies. A *trust company* proper acts under state rather than national law, and very frequently includes in its activities practically all branches of banking, including giving interest on savings, banking by mail, and the rental of safety-deposit boxes. It acts as registrar and transfer agent of stocks and bonds for corporations. It buys and sells high-grade securities, including stocks, bonds, and mortgages, on its own account as well as for its customers; and, as agent, buys, sells, and rents property and looks after the collection of rents.

Possibly its most important and remunerative activity lies in its function of executor and administrator of estates. It is in this particular that national banks that have power as guardian, administrator, etc., resemble it. Deriving its name from the word "trust," which means "confidence," "faith," etc., the trust company seeks the confidence of the people not only for money to be left with it

on deposit, but also for the conduct of some of the most important affairs of life, such as the care of estates for minors, widows, and others, and the carrying out of last wills and testaments.

To the prosecution of these ends it usually incorporates with large capital in order to guarantee safety, employs the best legal talent, and places at the head of its various departments men of integrity and ability. Its superiority over the personal executor, administrator, or guardian is apparent from the fact that it never dies, never takes a vacation, is never too busy, is always on the job, and has distinct advantages in the wide and diversified experience of its experts, whose collective honesty and ability would seem superior to that of any individual.

70. Land banks. Because farmers have found that ordinary banks cannot lend over long periods of time, a great deal of agitation developed during the period from 1870 to 1915 for a *land bank*. These institutions had been known in Europe a long time, and in some of our states laws had been passed authorizing the creation of private land banks. Finally, on July 17, 1916, the Federal Farm Loan Act was approved. The act is described in chapter viii.

71. The law of averages. So much of a bank's business is done for nothing, such as receiving deposits, paying checks, and keeping books for its customers, that many people wonder how a bank makes any money. The answer is that a bank

makes money by lending the funds left with it on deposit. A superficial examination of the matter would seem to indicate that it would not be safe for a bank to lend money left on deposit, since this may be called for at any time; but a closer study reveals the fact that it is entirely safe for it to do so.

A bank works on a *law of averages*. Its business, like that of an insurance company, is almost an exact science. A life insurance company, for example, insures the lives of a thousand men. It does not know which of these men will live and which will die in a given period, say a year, but it does know, almost to a certainty, *how many* will live and *how many* will die, and it fixes its rates from its tables of mortality so that it can pay all death losses and still have a good profit.

In like manner the banker does not know what depositors will want their money from day to day, but he does know, from his long experience with averages, that only a few people among his numerous depositors will call at any one time for their money. He knows, too, that, while every day some people check out portions of their savings, others are at the same time depositing. John Smith, for example, will draw some money to pay Bill Jones, and it frequently happens that Bill Jones will bring the same money to the bank to be deposited to his own credit.

The banker therefore knows how much to keep in reserve and how much to lend, and the soundness of his bank depends largely upon the skill with

which he handles this extremely important matter. You sometimes hear of banks *calling in loans.* This often means that they see a slight financial uneasiness ahead, and they want a little larger cash reserve to meet any unusual number of withdrawals of money. It may mean, again, that the banks call in certain kinds of loans in order to have money to make certain other kinds of loans. This is necessary in order that the banker may pay all calls for money upon presentation. Unless he can do this, his bank is bankrupt. Long experience teaches the banker that he must have on hand a certain percentage of his deposits in legal money, and this varies with the business conditions and the demand for money. The wise banker always keeps this before him in managing his bank. However, the law requires national banks, and state banks which are members of the Federal Reserve System in cities like New York, Chicago, and St. Louis, to maintain a reserve in legal money of 13 per cent against demand deposits; in reserve cities the amount is 10 per cent; and in all other banks 7 per cent. These are minimum reserves, but in certain times of the year the banks increase their reserves as the need requires.

Questions for Discussion

1. Why did banking begin so early in the world's history?

2. Why did not banking functions begin all at the same time rather than pass through a course of development?

3. What is the classification of financial institutions?

4. What is a charter and why is it required in organizing a bank?

5. What is the liability of a shareholder?

6. What is the bank's chief business?

7. How is a bank organized?

8. With what capital may state and national banks be organized?

9. How many national banks are there?

10. What is national bank currency?

11. State the difference in the organization of state, national, and private banks.

12. What is a clearing house?

13. State the advantages of such an institution.

14. What is a savings bank and what is the difference between stock and mutual savings banks?

15. What is the purpose of building and loan associations?

16. Look up the regulations governing the postal savings banks.

17. Why were land banks organized?

18. What is the law of averages as applied to banking?

19. Might you not organize a make-believe national bank in school? To what person in Washington might you write to furnish you with the necessary blanks and instructions? This would be a good exercise to carry out rather thoroughly. If you attempt it, use all the knowledge you have gained about the banking business.

CHAPTER IV

BANKING ARITHMETIC

EARNINGS OF BONDS AND STOCKS

72. Bonds. A *bond* is an instrument made by a government, corporation, or individual as an evidence of debt for the purpose of borrowing money. Bonds issued by corporations are usually secured by mortgage upon property. Those made by governments are not so secured. There are many forms of bonds, such as coupon bonds, registered bonds, mortgage bonds, first-mortgage bonds, sinking-fund bonds, collateral bonds, etc. The student would find it both interesting and instructive to learn, by independent research, the characteristics and safety for investment of various issues of bonds. Some are well secured; others are not so.

73. Interest. *Interest* is the price or premium paid by the borrower for the use of money. If a corporation or government issue bonds for the purpose of borrowing money, these bonds will draw a specific rate of interest, which will be paid to the purchaser of the bonds, the purchaser of the bonds being the lender of the money.

74. The rate of interest on bonds. Anyone who buys bonds for investment must know how to compute the return, for these securities seldom sell

at par. The market value varies. Hence, supposing that the interest is always paid, the investor who buys below par gets a higher rate than that named in the bond, and the investor who buys above par gets a lower rate than that named in the bond. The time at which a bond matures is also a factor in determining the rate of interest yielded to the investor.

Suppose, for example, that a 5 per cent bond of $100 par value is selling at $90, maturing in 1940. The interest is calculated on the par value, $100, and the investor gets the full interest, $5, for every $90 that he invests, which gives him a rate of $5\frac{5}{9}$ per cent. On the other hand, if he pays $1.10 for every dollar of par value—that is, if he buys at a premium of 10 per cent—he makes a rate of $4\frac{6}{11}$ per cent. The investor is often willing to take this smaller rate because of the greater security in the higher-priced bonds.

75. Finding the rate. Computing the rate on bonds purchased above or below par is a simple matter of finding what percentage one number is of another, as taught in the arithmetics under the head of decimals. For example, what part of 10 is 5? Clearly it is $\frac{5}{10}$, or $\frac{1}{2}$, of 10. And since 10 is 100 per cent of itself, 5 is 50 per cent of 10; that is to say, .50 of 10. This changing of a common into a decimal fraction is easily done in this manner:

$$\frac{5}{10} = 5 \div 10 = .50$$

Put in the usual form of short division, it is as follows:

$$10\,\overline{)\,5.00}\quad .50$$

In like manner we find what per cent \$.05 is of \$.90 (see the preceding section) by dividing .05 by .90, thus:

$$.90\,\overline{)\,.0500}\quad .05\tfrac{5}{9}$$
$$450$$
$$50$$

Also, we find what per cent \$.05 is of \$1.10 (see the preceding section) by dividing .05 by 1.10, thus:

$$1.10\,\overline{)\,.0500}\quad .04\tfrac{6}{11}$$
$$440$$
$$60$$

This leads to the rule: *To find the rate your investment earns, divide the amount of interest received on the par value by the amount you pay for the stock or bond.*

76. Stocks. *Stocks* are certificates of ownership of a corporation, and they usually carry with them the right to vote and the right to share in the distribution of any profits that may be made by the corporation. Both bonds and stocks will be more fully explained later.

77. Rate of profit on stocks. The rate of return on stocks is not fixed, as in the case of bonds, but fluctuates with the earnings of the companies issuing

them. Suppose a man bought Chesapeake & Ohio stock at $53\frac{1}{2}$, and a dividend of 3 cents on each dollar of stock was declared. The rate is found, as in the former cases, by dividing the percentage (.03) by the base (.535), thus:

$$
\begin{array}{r}
.056 \\
\hline
.535 \,|\, .030000 \\
\underline{2675} \\
3250 \\
\underline{3210} \\
40
\end{array}
$$

The rate of interest is therefore .056, or $5\frac{6}{10}$ per cent. The remainder of 40 at the end of the division is ignored.

COST OF DEALING IN STOCKS AND BONDS

78. Brokerage. Stocks and bonds are usually bought through dealers who make a business of knowing their value, and who charge a regular rate for making purchases for their customers. The present rates on the New York Stock Exchange are $\$.07\frac{1}{2}$ a share if the shares sell below \$10, \$.15 a share if the price ranges between \$10 and \$125, and \$.20 if the price goes above \$125. These charges are called *brokerage*. If stocks and bonds are bought through dealers, the brokerage must always be counted as part of the price.

79. Problems. In solving the following problems, refer to the preceding section for the brokerage if the brokerage must be counted.

1. A man bought fifteen 5 per cent $1,000 Illinois Central bonds at 85, maturing in 1950. What was the amount of his investment? What was his annual interest? What rate of interest did his investment earn?

2. An investor bought thirty $100 Victory Loan Bonds, maturing in 1923, paying $4\frac{3}{4}$ per cent, at 96.10. Find the amount of his investment, his annual interest, and the rate of interest earned on his investment.

3. If an investor owns shares of Sears Roebuck stock which he bought at 216, supposing the par value to be $100, what rate on his investment is he getting if the company declares a dividend of 40 per cent on its par value? If he has twelve $500 par value shares, what is the value of his stock at the purchase rate?

4. A trust company bought for one of its clients thirteen $500 C. B. & Q. bonds at $94\frac{3}{8}$, maturing in 1940. The bonds pay 4 per cent. What was the amount of the purchase, the annual interest, and the rate earned for the investor?

5. If a man bought twenty-four $100 shares of Virginia Chemical, preferred, at 107, what rate of dividend on his investment did he get if he received $292 when a dividend was declared? What rate on the par value? What was the amount of his investment?

6. A man owns 123 shares of stock, the par value being $100 per share. What income does he get if he receives $1\frac{1}{2}$ per cent dividends quarterly?

7. If a man buys seventy $100 shares in Southern Sugar at 99 and sells at $100\frac{1}{2}$, what is his gain?

8. The agent for an estate bought Studebaker stock at 68. What dividend would the estate have to receive

on each dollar's worth of stock to make an income of 6 per cent?

9. What is the income and what is the percentage of income from 213 $100 $3\frac{1}{2}$ per cent Liberty Bonds bought on June 15, 1920, at 91.40, maturing in 1947? If the owner keeps the bonds until they are paid by the government, what will his total return be for the last year of their life? (NOTE. These bonds were issued June 15, 1917, and mature June 15, 1947.)

10. A man has three $50 Second Liberty Loan Bonds, which pay 4 per cent. He bought them from a personal friend at the market price on June 5, 1920, at 85.80. What did he pay for them? What is the rate of his income from them? If he keeps them until their maturity, what will be his return from them the last year of their life? What percentage of his investment is this return? What percentage of the par value of the bonds is this return?

11. If a man bought six $50 $4\frac{1}{4}$ per cent Third Liberty Loan Bonds at par at the time they were issued, and if he parts with them at 90.94 to pay a debt, how much is he paying in addition to the original debt? If he had kept his bonds and had borrowed money at 6 per cent to pay the debt, repaying his loan in one year, would he have gained or lost, and how much?

12. A man took twelve $100 $4\frac{3}{4}$ per cent Victory Loan bonds on a debt at 95.50 on May 20, 1920. They will mature on May 20, 1923. If he keeps them until that time, what will be his total return on them from the date of purchase? What will be his average yearly return from them? What will be the average rate per cent of income?

METHODS OF COMPUTING INTEREST

80. A table of days. While bankers ordinarily count a month as having 30 days, there are times when the exact number of days is counted in the computation of interest; and a table has been devised (see page 92) to save the time and labor of adding the number of days between two dates. It consists merely of twelve columns of figures which number the days of the year, beginning with January 1 as the first day. At the top of the February column you see the number 32, which means that February first is the 32d day of the year. Likewise, March 1 is the 60th day of the year, and so on.

Let us suppose it is necessary to find the number of days between January 16 and October 5. In the January column find 16. In the October column find the fifth number, which is 278, which means that October 5 is the 278th day of the year. Subtract 16 from 278, and you have the number of days between the two dates—not counting the first date, January 16.

In case the year is leap year and the time includes February 29, it is necessary to add one day to the result. In case the time runs into the next year, find the time from the first date to the end of the year, and from that time to the required day in the next year.

81. Partial payments. Sometimes a borrower wishes to pay a debt in installments, having each

A Table of Days

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32	60	91	121	152	182	213	244	274	305	335
2	33	61	92	122	153	183	214	245	275	306	336
3	34	62	93	123	154	184	215	246	276	307	337
4	35	63	94	124	155	185	216	247	277	308	338
5	36	64	95	125	156	186	217	248	278	309	339
6	37	65	96	126	157	187	218	249	279	310	340
7	38	66	97	127	158	188	219	250	280	311	341
8	39	67	98	128	159	189	220	251	281	312	342
9	40	68	99	129	160	190	221	252	282	313	343
10	41	69	100	130	161	191	222	253	283	314	344
11	42	70	101	131	162	192	223	254	284	315	345
12	43	71	102	132	163	193	224	255	285	316	346
13	44	72	103	133	164	194	225	256	286	317	347
14	45	73	104	134	165	195	226	257	287	318	348
15	46	74	105	135	166	196	227	258	288	319	349
16	47	75	106	136	167	197	228	259	289	320	350
17	48	76	107	137	168	198	229	260	290	321	351
18	49	77	108	138	169	199	230	261	291	322	352
19	50	78	109	139	170	200	231	262	292	323	353
20	51	79	110	140	171	201	232	263	293	324	354
21	52	80	111	141	172	202	233	264	204	325	355
22	53	81	112	142	173	203	234	265	295	326	356
23	54	82	113	143	174	204	235	266	296	327	357
24	55	83	114	144	175	205	236	267	297	328	358
25	56	84	115	145	176	206	237	268	298	329	359
26	57	85	116	146	177	207	238	269	299	330	360
27	58	86	117	147	178	208	239	270	300	331	361
28	59	87	118	148	179	209	240	271	301	332	362
29	.....	88	119	149	180	210	241	272	302	333	363
30	.....	89	120	150	181	211	242	273	303	334	364
31	.....	90	.....	151	.....	212	243	.....	304	.....	365

installment include the interest due and a portion of the principal. A rule sanctioned by the United States government works out as follows:

Suppose a man borrowed $300 for three years at 5 per cent, and wished to pay the debt in three installments of $100 each, with accrued interest. At the end of the first year he would pay $100 plus $15, the interest for the year, thus reducing his debt to $200, upon which interest would be calculated for the ensuing year. And so on until the debt was discharged. Thus:

Principal	$300
Interest for first year	15
Amount	315
Payment	115
New principal	200
Interest for second year	10
Amount	210
Payment	110
New principal	100
Interest for third year	5
Amount	105
Payment	105

The last payment equaling the last amount, the debt is discharged.

Suppose, however, that the payment at one time does not equal or exceed the interest. In this case a new principal is not to be formed, but the interest is to be carried forward until such time as two or more payments equal or exceed the interest. If

the second payment is only $5, the problem is worked out thus:

Principal		$300
Interest for first year		15
Amount		315
Payment		115
New principal		200
Interest due, second year	$10	
Payment, second year	5	
Unpaid interest		5
Interest, third year, on $200		10
Amount		215
Payment, third year		115
New principal		100
Interest, fourth year		5
Amount		105
Payment		105

It is clear that failure to make the usual payment at the end of the second year lengthened the life of the note to four years, and cost the borrower ten dollars extra, because the principal stood two years at $200.

The unpaid interest at the end of the second year is not added to the principal to form a new principal, because the borrower would then be paying interest on interest, which is against a decree of the United States Supreme Court.

When a partial payment is made, an entry to that effect is made on the back of the note.

82. Problems. Solve the following problems, using that one of the forms given above that suits the individual case:

1. A note for $2,000, to run for four years, at 6 per cent interest, was paid in four equal annual payments, with interest as due. Solve in detail.

2. A note for $2,500 was to run for five years, at 5 per cent interest, and was to be paid in five equal annual installments, with interest as due. At the time the fourth payment was due, the borrower was unable to pay anything, not even the interest. Nevertheless he was able to discharge the entire debt at the end of the five years. What payments were recorded on the back of the note?

3. A note for $3,000, dated June 10, 1916, and bearing interest at 6 per cent, had one payment of $580 indorsed upon it on June 10, 1917. On June 10, 1918, the borrower found it convenient to pay the entire debt. What was due?

4. A man gave his note for $360, at 5 per cent interest, to be paid in six equal bimonthly payments. What were the payments, and what was the total amount he paid as interest?

5. A note for $850, dated April 7, 1918, and bearing interest at 7 per cent, had the following payments indorsed upon it: October 7, 1918, $75; April 7, 1919, $100; and October 7, 1919, $55. What was due six months later?

83. Compound interest. If a man deposits $100 in a savings bank and receives 4 per cent interest on it, at the end of the year he will have four dollars in interest. The bank allows him to add

this to his $100, making a new principal of $104, which will draw interest for the second year, and so on indefinitely, so that at the end of a period of years the original sum will be greatly augmented. This is called *compound interest.*

84. A problem. Copy the following form on a sheet of paper, and fill in the amounts, as you compute them, on an original capital of $100.

Time	3%	4%	5%	6%	7%	8%
1 yr.						
2 yr.						
3 yr.						
4 yr.						
5 yr.						
6 yr.						
7 yr.						
8 yr.						
9 yr.						
10 yr.						

85. A common form for computing interest. Computing interest is a simple matter of the use of decimal fractions, as they are taught in grammar-school arithmetics. A short review will be given here.

There are several special methods, any one of which may be more suitable to a particular problem than any of the others; but the one that follows suits any problem whatever and is easily understood.

Suppose that it is necessary to find the interest on $365 for 3 years 6 months and 10 days at 5 per cent interest. Then we have:

$$\begin{array}{l} \$365 \\ .05 \\ 12\overline{)18.25} \times 3 = \$54.75 \\ 30\overline{)1.521} \times 6 = 9.126 \ldots\ldots\ldots \text{or } 3\overline{)1.521} \times 6 \\ .051 \times 10 = .51 \qquad\qquad .507 \text{ or } .51 \\ \$64.386, \text{ or } \$64.39 \end{array}$$

Dividing the interest for one year by 12 gives the interest for one month, and dividing the interest for one month by 30 gives the interest for one day. The multiplications at the right of the divisions give the proper amounts for the required number of years, months, and days, and the sum gives the total.

It will be noticed that when the division does not come out even, the nearest figure in the third decimal place must be counted. Thus, in dividing 18.25 by 12 we get 1.5208, which is counted as 1.521.

86. The 6 per cent method. A calendar year contains 365 days, except leap year, which contains 366; but, for the sake of convenience in computing interest, bankers consider the year as containing 360 days, that is, twelve months of 30 days each. Notes given to a bank are usually made payable in 30, 60, or 90 days, though sometimes for four

months, and rarely for six months. As 6 per cent is a frequent rate of interest, the following method is often used:

The int. on \$1 for 1 yr. @ 6 per cent is..... \$.06
The int. on \$1 for 1 mo. @ 6 per cent is..... .005
The int. on \$1 for 1 day @ 6 per cent is..... .000$\frac{1}{6}$

Now if it is required to find the interest on \$260 for 2 years 3 months and 10 days at 6 per cent, we proceed as follows:

The int. on \$1 for 2 yrs. $=2\times.06=$..... .12
The int. on \$1 for 3 mos. $=3\times.005=$..... .015
The int. on \$1 for 10 days $=10\times.000\frac{1}{6}=$ ..... .001$\frac{2}{3}$
The int. on \$1 for 2 yrs. 3 mos. 10 days=..... .136$\frac{2}{3}$
The int. on \$260 for the same time will be $260\times.136\frac{2}{3}$ $=\$35.53\frac{1}{3}$, which is counted as \$35.53.

87. Variations of the 6 per cent method. If the rate of interest in the problem in the preceding section were 3 per cent instead of 6 per cent, the interest would be half of \$35.53; and if the rate were 4 per cent, $\frac{1}{3}$ of \$35.53 subtracted from \$35.53 would give the correct interest. Again, if the rate were 8 per cent, $\frac{1}{3}$ of \$35.53 added to \$35.53 would give the correct interest. The student will find little difficulty in devising other ways of finding the interest at various per cents, using the interest at 6 per cent as a basis.

88. The bankers' method. This method is based on the fact that two months are one-sixth of a year. The rate for two months is therefore one-sixth of 6

per cent, or 1 per cent. To get the interest on any amount at 6 per cent for two months, then, is a simple matter of dividing by 100, that is, of moving the decimal point two places to the left. Thus the interest on $680 for two months at 6 per cent is $6.80.

Suppose that it is required to find the interest on $975 for 3 months and 10 days at 6 per cent.

The int. on $975 for 2 mo. @ 6% = $9.75
The int. on $975 for 1 mo. @ 6% = ½ of $9.75 = 4.875
The int. on $975 for 10 da. @ 6% = ⅓ of $4.875 = 1.625
The int. on $975 for 3 mo. 10 da. @ 6% = $16.25

There are variations of this method for finding the interest at other rates than 6 per cent. For example, to find the interest at 3 per cent, divide the interest at 6 per cent by 2. To find the interest at 7 per cent, divide the interest at 6 per cent by 6 and add the result to the interest at 6 per cent. The student will be able to make other variations of the method.

89. Cancellation method. If the time a note is to run is merely years and months, cancellation provides a simple method of computing interest. It is necessary only to change the years and months into a fraction of a year, to write the rate as a common fraction, and to proceed as in an ordinary problem in cancellation. Thus, if it is necessary to find the interest on $540 for 1 year and 8

months at 4 per cent interest, the solution is as follows:

$$\frac{\cancel{45}^{9}}{\cancel{540}\times\cancel{20}\times 4}{\cancel{12}\times\cancel{100}_{5}} = 36$$

This method can be used if the time includes days. The time must then be changed into a fraction with the number of days in the year as a denominator. Thus, if a note were to run for 95 days, the fraction would have to be $\frac{95}{360}$.

90. Solution of problems. Solve the following problems by whatever methods seem easiest:

Principal	Rate	Time	Interest	Amount
$ 456.00	6%	60 days		
2,579.00	4%	60 days		
7,654.54	5%	90 days		
9,854.34	3%	30 days		
34,657.00	3½%	4 mos		
54,987.75	7%	3 yrs. 4 mos. 10 days		
8,903.50	8%	2 yrs. 3 mos. 15 days		
4,563.50	4½%	2 yrs. 4 mos		
4,321.75	2%	5 yrs. 6 mos		
45,876.00	5½%	10 yrs. 3 mos		
60,000.00	3%	60 days		
5,698.00	8%	60 days		
45,009.53	6%	90 days		
6,590.00	4%	3 mos. 10 days		
90,000.00	3%	60 days		
85,000.00	4%	3 mos. 15 days		

91. Bank discount. As explained in section **37**, a note made to a bank does not begin to draw inter-

est until due, for the bank deducts, from the face of the loan, the interest up to the day of maturity, and further interest is charged only if the note is not paid at once or is renewed. Banks also discount notes held by other persons, firms, or corporations than themselves. For example, suppose that the Standard Brick Company, of Chicago, holds a promissory note made by the George Ashton Company. The note is for $840, runs for 90 days, and bears interest at 6 per cent. If the brick company needs the money before it is due, say 30 days after the note is made, the bank will buy the note if it has confidence in the George Ashton Company, and will charge what is called *discount*, or *bank discount*. The discount is the interest from the day the note is discounted to the day of its maturity. In this case, supposing the rate of discount is 6 per cent, the bank would take $8.40, which is the interest for 60 days. The difference between the face of the note and the discount is called the *proceeds*, which, in this case, is $831.60. If the George Ashton Company does not pay the note when it is due, the Standard Brick Company is compelled, by the terms of the agreement, to pay the debt itself.

In some instances, where the bank has confidence in an especially good customer, it will add to the face of the note the interest that would have been paid by the borrower, thus making a new *amount* from which the discount is deducted. In the case

explained in the preceding paragraph, for example, the interest on $840 for 90 days is $12.60, which, added to the face of the note, makes $852.60. Six per cent of this amount for 60 days is $8.526, which, subtracted from the new amount, leaves $844.074, or $844.07, as the proceeds.

An additional matter about counting the time is to be considered. Suppose the note in question had been dated June 2 and were to run three months. It would then be due September 2, and would be discounted July 2. If the first day, July 2, is counted, there would be 30 days in July, 31 in August, and 2 in September, making a total of 63 days to be counted in computing the discount, instead of 60 as previously explained. Some banks count the time in this way.

92. Problems. Find the discount and the proceeds in the problems given in the table on the opposite page. In computing the time, do not count the day on which a note is discounted.

Select any five of these problems and find the discount in the way described in the second paragraph of the preceding section.

93. Interest tables. Banks make use of tables giving the interest for many amounts at various rates of interest and for different lengths of time. There are several shorter tables of this kind, from which interest may be computed. One such table will be found on page 105. It is used in the following manner. If it is desired to find the interest

Face	Date	Time	Discounted on	Rate of Int.	Rate of Dis.	Discount	Proceeds
$2,000.....	February 2, 1928....	60 days...	March 2....	6%	6%		
365.....	March 3, 1928.....	90 days...	March 3....	6%	5%		
690.....	March 10, 1928.....	1 year.....	March 10...	5%	5%		
480.....	March 15, 1928.....	8 months..	June 1.....	5%	4%		
3,860.....	April 4, 1928.....	6 months..	April 5.....	4%	3%		
9,000.....	April 6, 1928.....	3 months..	April 20....	4%	$3\frac{1}{2}$%		
867.....	April 20, 1928.....	6 months..	April 30....	6%	7%		
500.....	May 30, 1928.....	9 months..	June 15....	6%	7%		
649.....	June 10, 1928.....	4 months..	June 20....	5%	7%		
3,890.....	July 30, 1928.....	90 days...	August 2...	5%	6%		

on $720 for 1 year and 2 months at 7 per cent, then—

Int. on $100 for 1 yr. @ 7 per cent = $7. On $700 = 7 × $7 = ...	$49.00
Int. on $100 for 2 mo. @ 7 per cent = $1.17. On $700 = 7 × $1.17 = ...	8.19
Int. on $10 for 1 yr. @ 7 per cent = $0.70. For $20 = 2 × $0.70 = ...	1.40
Int. on $10 for 2 mo. @ 7 per cent = $0.12. For $20 = 2 × $0.12 = ...	0.24
Total interest = ...	$58.83

In using this table, however, the student must bear in mind the following fact: the figures in the table are computed to the nearest second decimal place, and the result will not be precisely the same as if the interest were calculated by one of the usual methods and all fractions carefully used. For example, the exact interest on $100 for one month at 7 per cent is $58\frac{1}{3}$ cents, instead of 58 cents, as given in the table. If the fraction were $\frac{2}{3}$, the whole would be counted as 59 cents. These slight differences make a difference of 3 cents in the problem solved from the table as given on page 105. They would not occur in the tables bankers use, for here the decimals are carried out several places.

If it is desired to find interest at $3\frac{1}{2}$ per cent, find the interest for 7 per cent and divide by 2.

Interest Table

Time		Days											Months						1 Yr.
Amt.	Int.	1	2	3	4	5	6	7	8	9	10	20	1	2	3	4	5	6	
$1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3
	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	4
	5	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2	3	5
	6	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	2	3	6
	7	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	3	4	7
$2	3	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2	3	6
	4	..	..	..	..	..	..	..	..	..	..	1	1	1	2	2	3	4	8
	5	..	..	..	..	..	..	..	..	..	..	1	1	2	3	3	4	5	10
	6	..	..	..	..	..	..	..	..	..	..	1	1	2	3	4	5	6	12
	7	..	..	..	..	..	..	..	..	..	..	1	1	2	4	5	6	7	14
$3	3	..	..	..	..	..	..	..	..	..	..	..	1	1	2	3	4	5	9
	4	..	..	..	..	..	..	..	..	..	..	1	1	2	3	4	5	6	12
	5	..	..	..	..	..	..	..	..	..	..	1	1	3	4	5	6	8	15
	6	..	..	..	..	..	..	..	..	..	1	1	2	3	5	6	8	9	18
	7	..	..	..	..	..	..	..	..	1	1	1	2	4	5	7	9	11	21
$4	3	..	..	..	..	..	..	..	..	..	..	..	1	2	3	4	5	6	12
	4	..	..	..	..	..	..	..	..	..	..	1	1	2	4	5	6	8	16
	5	..	..	..	..	..	..	..	..	1	1	1	2	3	5	7	8	10	20
	6	..	..	..	..	..	..	..	..	1	1	1	2	4	6	8	10	12	24
	7	..	..	..	..	..	..	1	1	1	1	2	2	5	7	9	12	14	28
$5	3	..	..	..	..	..	..	..	..	..	..	1	1	2	4	5	7	8	15
	4	..	..	..	..	..	..	..	..	1	1	1	1	3	5	6	8	10	20
	5	..	..	..	..	..	..	..	1	1	1	1	2	4	6	8	10	13	25
	6	..	..	..	..	..	1	1	1	1	1	2	3	5	8	10	13	15	30
	7	..	..	..	..	..	1	1	1	1	1	2	3	6	9	12	15	18	35
$10	3	..	..	..	..	..	..	..	1	1	1	1	2	5	7	10	12	15	30
	4	..	..	..	..	1	1	1	1	1	1	2	3	6	10	13	16	20	40
	5	..	..	..	..	1	1	1	1	2	2	3	4	8	13	17	21	25	50
	6	..	..	1	1	1	1	1	2	2	2	3	5	10	15	20	25	30	60
	7	..	..	1	1	1	1	1	2	2	2	4	6	12	18	23	29	35	70
$25	3	..	..	..	..	..	..	1	1	1	2	4	6	12	19	25	31	38	75
	4	..	..	1	1	1	1	2	2	2	3	5	8	16	25	33	41	50	1.00
	5	..	1	1	2	2	2	3	3	3	3	7	10	21	31	42	52	63	1.25
	6	..	1	1	2	2	3	3	3	3	4	8	13	25	38	50	63	75	1.50
	7	..	1	1	2	2	3	3	4	4	5	10	15	29	44	58	73	88	1.75
$50	3	..	1	1	1	2	2	3	3	4	4	8	12	25	37	50	62	75	1.50
	4	..	1	1	2	3	3	4	4	5	6	11	16	33	50	67	83	1.00	2.00
	5	..	1	1	2	3	4	5	6	6	7	14	21	42	63	83	1.04	1.25	2.50
	6	..	1	2	3	3	4	5	6	7	8	17	25	50	75	1.00	1.25	1.50	3.00
	7	..	1	2	3	4	5	6	7	8	9	19	29	58	88	1.17	1.46	1.75	3.50
$100	3	..	1	1	2	3	4	5	6	6	7	8	16	25	50	75	1.00	1.25	1.50	3.00
	4	..	1	2	3	4	6	6	8	9	10	11	22	33	66	1.00	1.33	1.67	2.00	4.00
	5	..	1	3	4	6	7	8	10	11	13	14	28	42	83	1.25	1.67	2.08	2.50	5.00
	6	..	2	3	5	7	8	10	12	13	15	17	33	50	1.00	1.50	2.00	2.50	3.00	6.00
	7	..	2	4	6	8	10	12	14	16	18	19	39	58	1.17	1.75	2.33	2.92	3.50	7.00

CHAPTER V

ANALYZING A BANK'S STATEMENT

RESOURCES AND LIABILITIES

94. Bank statements. From time to time one sees in the newspapers the published statements of banks giving their resources and their liabilities. The *resources* of a bank are what it owns; its *liabilities* are what it owes. The publication of this information is required by law, because it is of great importance to the public to know just the financial condition of the banks. It is now necessary to analyze a bank statement by means of the accompanying table on page 107.

95. The resources of a bank. The left-hand column of the statement gives the resources of the bank, which, in this case, comprise eleven items. These will be taken up in order.

a) *Demand loans.* Demand loans are money which the bank has lent to responsible people, subject to the bank's call upon demand. These loans are probably the most *liquid* (that is, the loans which are most easily liquidated, or converted into cash) of banking resources, and are the first means of help in times of financial anxiety. They are carefully passed upon by officers of the bank and, in a large percentage of cases, are safeguarded by

A BANK STATEMENT

CONDENSED STATEMENT OF

THE NATIONAL CAPITAL BANK

RALEIGH, N. C.

DECEMBER 31, 1928

Resources		Liabilities	
Demand Loans	$ 600,000.00	Capital Stock	$ 325,000.00
Time Loans and Discounts	935,987.98	Surplus	100,000.00
U. S. Bonds to Secure Circulation	200,000.00	Undivided Profits	85,939.13
U. S. Liberty Bonds	1,105,950.00	Unearned Discount	20,112.37
Corporation Bonds	27,750.00	Reserve for Interest	14,000.00
Municipal Bonds	190,000.00	Circulation Outstanding	200,000.00
Railroad Bonds	10,000.00	Bills Payable Secured by Liberty Bonds	450,000.00
Stock in Federal Reserve Bank	12,750.00	Deposits	2,420,458.44
Banking House	15,915.35		
Redemption Fund on Deposit with U. S. Treasurer	10,000.00		
Cash on Hand and Due from Other Banks	507,156.61		
Total	$3,615,509.94	Total	$3,615,509.94

personal security or collateral. In addition to these precautions, the board of directors passes upon the loans at regular intervals.

b) Time loans and discounts. Time loans and discounts represent money which the bank has lent, repayable to it on various dates in the future. The loans are safeguarded in the same way as demand loans.

c) United States bonds to secure circulation. As explained elsewhere, a national bank deposits with the Treasurer of the United States a certain amount of United States bonds, which it has bought in the open market, in order to secure its circulation. State banks do not issue currency.

d) United States Liberty Bonds. Liberty Bonds represent ownership of various issues of Liberty Bonds purchased by the bank from the government in order to furnish Uncle Sam with money to win the war.

e) Corporation bonds. Corporation bonds are bonds of supposedly high-grade industrial enterprises, and are usually secured by first mortgages on the properties issuing the bonds. A *mortgage* is a conveyance of property as security for the payment of debt, and becomes void upon payment according to the stipulated terms. Sometimes a second mortgage is placed upon property. A first mortgage has priority as security. Such obligations may have been issued by prosperous cotton mills, or steel mills, or motor car factories, or mining

companies; but to whatever class of industrial enterprises they belong, they were, or should have been, selected with great care by the officers of the bank.

f) *Municipal bonds.* Municipal bonds are issued by county, city, or state, and belong to a class which, after having been issued by due process of law, are generally regarded by banks as high-class investments.

g) *Railroad bonds.* Railroad bonds are, or should be, secured by first mortgage on the railroad properties issuing them.

h) *Stock in Federal Reserve Bank.* The bank owns stock in the Federal Reserve Bank by virtue of being a member bank of the Federal Reserve Bank, and the amount is 3 per cent of the member bank's capital and surplus.

i) *Banking house.* The term "banking house" represents the cost of the bank's place of doing business, including the building, furniture, and fixtures, together with the ground upon which the building stands. If the cost of the banking house has been high, the conservative banker will reduce the amount at which it is carried on the books a little each year, taking such reductions out of the earnings, until the item stands at a figure for which the building will easily sell.

j) *Redemption fund with United States Treasurer.* The redemption fund is the amount of *money* deposited by the bank with the United States Treasurer, and must be 5 per cent of the bank's

circulation. In the case shown by the table on page 107, the bank's circulation being $200,000, the amount deposited with the Treasurer of the United States is $10,000.

As the bank's worn-out money is presented for redemption to the Treasury Department, the Treasury redeems it and charges the amount to the bank's redemption fund account. The bank then remits to the Treasury for the old, worn bills, and the Treasury sends to the bank new, clean, crisp money. This operation keeps the redemption fund standing at 5 per cent of the bank's circulation. A bank's *circulation* is its outstanding money or circulating notes, the payment of which is guaranteed by United States circulation bonds deposited with the United States Treasurer by the bank.

k) Cash on hand and due from other banks. This last heading, under "Resources," "Cash on Hand and Due from Other Banks," represents the actual cash in the bank's vaults and the money which the bank has on deposit with the Federal Reserve Bank and other banks.

The total of the foregoing items represents the whole property of the bank.

96. The liabilities of a bank. Let us now consider the liability column of the bank's statement, that is, its debts—the money it owes to others. Contradictory as it may seem, the strength of a bank is found in the liability column, or in the column of its debts,

a) *Capital stock.* The first item under liabilities is "Capital Stock." This is money paid into the bank by the stockholders, or owners of the bank. Having been paid in by the stockholders, it is a debt, or liability, to them; but as it remains with the bank perpetually, and cannot be checked out, it is a very decided element of strength. As a rule, therefore, the larger the capital stock, the stronger the bank.

b) *Surplus.* Money which has been accumulated over and above the profits paid to stockholders is called surplus; it has been set aside as a permanent fund to add strength to the business. As it belongs to the stockholders, it is a debt due them; but as it remains with the bank permanently, like the capital, it is also a very decided element of strength. All well-managed banks strive to build up a substantial surplus.

c) *Undivided profits.* Like the surplus, undivided profits are money earned, and, again like the surplus, they belong to the stockholders; but they are unlike the surplus in that they are not a permanent fund. They may be paid out to the stockholders as dividends, either as a whole or in part, according as the directors may determine. The custom among the safest banks, however, is to pay out a part of the undivided profits as dividends, and add the other part to the surplus fund, making the bank stronger from time to time.

d) *Unearned discount.* Money which is in the process of being converted into surplus, or undivided

profits, is called unearned discount. It is money which the bank has charged and collected from borrowers but which has not yet been earned because the loans from which it is collected are not yet due.

e) Reserve for interest. Money set aside by the bank to pay interest to depositors as it accrues is called reserve for interest. This is a wise provision, for it enables the bank to know at all times what its net profits are.

f) Circulation. Circulation is the bank's own notes, scattered far and wide over the country, and passing current among the public as money. As before explained, its value is guaranteed by the United States, and the United States is in turn protected by a like amount of "United States bonds" deposited in the United States Treasury by the bank. Consequently, even if a national bank should fail, its circulating notes would be paid by the government.

g) Bills payable secured by Liberty Bonds. Bills payable secured by Liberty Bonds are money which the bank itself has borrowed, either from some of its corresponding banks or from the Federal Reserve Bank—in all probability to accommodate customers who have engaged themselves to buy bonds.

h) Deposits. Deposits are moneys which have been left with the bank by the public as a convenience and for safe-keeping. They are the real debts of the bank—debts which it is called upon by depositors to pay every day, in part.

The item "Deposits," however, is the item which every bank strives to increase, for it is upon these deposits that it makes its money. If they are large, and loans are safely made, the bank will prosper in proportion; hence, while they are debts, there is great strength in them. The experienced banker knows what proportion of them must be retained in cash in order to meet the daily demands from depositors, as explained elsewhere in this book.

The items given above are all the debts the bank owes.

PROTECTION OF DEPOSITORS AND STOCKHOLDERS

97. In case of a panic. But let us suppose that there is an unusual demand from depositors; let us suppose, even, that they have become panic-stricken, and that a great majority, or even all of them, demand their money. What means would a bank like the National Capital Bank (in the table) take to meet the situation? As shown by the statement, the bank has on deposit $2,420,-458.44. All of this sum, we will suppose, it would have to pay. It would first rediscount with the Federal Reserve Bank such proportion of its commercial paper as thought desirable, and then it would, if necessary —

a) call in demand loans, amounting to..... $600,000.00
b) sell corporation bonds, amounting to... 27,750.00
c) sell municipal bonds, amounting to..... 190,000.00

d) sell its railroad bonds, amounting to....	10,000.00
e) sell Liberty Bonds not hypothecated,[1] amounting to.....	655,950.00
f) utilize cash on hand, amounting to.....	507,156.61
g) borrow balance needed from Federal Reserve Bank on its time loans, which it could easily do if the loans had been carefully made.....	429,601.83

which would give the bank a sum total of $2,420,458.44 —enough to pay its depositors in full.

98. Situation of the stockholders. How would the stockholders then stand? As the bank had $935,987.98 of time loans and used only $429,601.83 of the amount with which to borrow from the Federal Reserve Bank, it would have left $506,386.15 in notes. It would have also $12,750 in Federal Reserve Bank stock and its bank building. The sum of these amounts would be enough to repay to the stockholders the $325,000 of capital stock they originally put into the business, and give them a profit of $194,056.15.

All this is based on the supposition that the loans of the bank had been safely made. It is apparent, then, that the officers of a bank are under the highest obligation to protect not only the depositors, but the shareholders as well, and that in order to do so they must make loans with ample security.

[1] *To hypothecate bonds* is to pledge them for the payment of a debt, but not to give the lender actual possession of the bonds. It will be noted that the National Capital Bank owned in Liberty Bonds $1,105,950, but that it had used $450,000 of them upon which to borrow money, leaving a balance of $655,950.

99. The bank examiner. The *bank examiner* is appointed by state or national authority, as the case may be, and is directed to make as complete examination as possible. He comes unannounced, presents his credentials to the president or to the cashier, and temporarily takes charge of the bank. He and his assistants are expert accountants, usually selected because of their previous banking experience, and are vested with complete authority to make an examination of the bank's affairs.

The first step taken by the examiner is to count the cash and verify its correctness. He will then examine the general and individual ledgers to ascertain whether they are in balance. If any overdrafts appear, the attention of the officers is called to the matter and instructions are given to make prompt adjustments.

In turn the notes, bonds, mortgages, and all other securities are scrutinized. If any security appears to be carried on the books of the bank at above its market value, if any note seems to be insufficiently secured, or if any overdue paper is found, the matter is reported, in the case of a national bank, to the Comptroller of the Currency at Washington, who has authority to compel proper adjustment. Such deficiencies when found in state banks are reported to the State Banking Department.

The stock register is carefully checked up for the purpose of ascertaining whether or not the outstanding capital stock of the bank is overissued,

The "minutes" book is examined for the purpose of learning whether or not regular meetings of the directors have been held, and whether or not the directors have performed their proper duties in a general supervision of the bank's business.

A record of the bank's accounts with all other banks is taken, and at a later date these accounts are reconciled and verified by correspondence.

When the examination is completed, a detailed report of the bank's condition is sent to the State Banking Department or to the Comptroller of the Currency for his inspection and criticism. If an unsound and unsafe condition is found to exist, the Comptroller of the Currency or the proper state officers are informed. They then give orders to have the doors of the bank closed, and a receiver is appointed to wind up its affairs.

Usually the examination of a bank is completed within one day; but in the case of larger banks such examination will extend over a period of ten days or longer. Such examinations are to some degree superficial, because, even in the case of the smaller banks, it would take at least thirty days to verify the individual balances of its several hundred depositors. The examination is usually thorough enough, however, for the examiner to gauge correctly the character of the bank's management; and should there lurk in his mind any suspicion of irregularity, he has the authority to come back the next day, or the next week, or at any other time his

judgment dictates. It is therefore improbable that irregularities in a bank's management can exist for any length of time if the examiner is efficient and does his duty.

All examinations are made at the expense of the banks examined.

100. Other examiners. In addition to these periodic examinations by the bank examiner, many of the best managed banks — both state and national — are examined by audit experts, by their boards of directors, and some others by the clearing-house examiner. The main idea, of course, behind these examinations is safety for depositors, and for the invested capital of the shareholders in the shares of the bank.

Questions for Discussion

1. Why do banks publish statements?
2. What are resources? Liabilities?
3. Why do the debit and the credit sides of a bank statement always show the same totals?
4. What are time loans? What is redemption fund? Capital stock? Surplus? Undivided profits? Unearned discount? Reserve for interest? Circulation? Bills payable? Deposits? Time loans?
5. How can you determine the strength of a bank from its statement?
6. How often are statements published?
7. How would a bank protect itself in case of panic?
8. Explain the work of a bank examiner.
9. Upon what does the security of a bank most depend?

10. Who passes upon loans?

11. Why must security be demanded?

12. Get a statement from some bank and analyze it. It you can get its statements for several previous years, or for its whole history, determine its net rate of earnings for the whole time.

13. If 85 per cent of the deposits are employed in loans, what is the earning capacity of the bank?

14. Can you tell from the statements whether or not the bank has had a healthy growth?

CHAPTER VI

SOME FAMOUS BANKS

THE BANK OF ENGLAND

101. Origin of the bank. Banking began in England by the activities of the goldsmiths, who found it profitable to be exchangers of money in London, just as other persons had found this a profitable business in Amsterdam and elsewhere (chapter iii, section **47**), for much commerce came to London. By and by there grew up the idea of receiving coin and bullion on deposit, of issuing paper receipts against it, and of making loans from the money on deposit. Following up this new form of business, William Patterson, a Scotchman, projected the Bank of England in 1694 as a joint-stock bank, establishing it upon a loan of its whole capital—£1,200,000, or about $6,000,000—to the government of William and Mary, the monarchs, at 8 per cent interest. So attractive did the venture seem to the keen business men of London that the whole stock was subscribed in a little more than ten days. It is essential, however, to say that the acceptance of the bank proposal by the king was due to the difficulty the government had in borrowing and the unsatisfactory collection of taxes by the king's officers.

102. Character and success of the bank. In later years its capital has been increased, and its business activities have been felt throughout the world, so that now the "Old Lady of Threadneedle Street," as it is sometimes called, occupies a commanding position. More than fourteen hundred people are required to perform the numerous and intricate duties of the bank itself and its eleven branches. The consummate skill and wisdom with which the Bank of England has been managed has in large measure made London the financial center of the world. It has stood out as a bulwark of finance, and has been known as the world's strongest financial institution. This reputation was not the result of bigness alone, for it was not, and is not today, the largest bank, but it was rather because of its ability to meet its obligations in gold.

103. Advantages of the bank. The Bank of England, however, being the oldest in the country, and the fiscal agent of the government, has had some advantages over its competitors, even over those which surpass it in deposits. It was the only joint-stock bank in England and Wales until 1826. Until 1862 it was the only bank in England whose shareholders were liable only to the extent of their holdings. Since 1833 its notes have been legal tender[1]

[1] According to Webster, *legal tender* is currency or money which the law authorizes a debtor to tender and requires a creditor to receive in payment of money obligations. It differs in different countries. Gold coins are legal tender in both Great Britain and the United States at their nominal value to any amount. In the United States standard silver dollars and United States Treasury notes are legal tender to any amount unless the contrary is stipulated in a contract.

The Bank of England

everywhere except at the bank itself. A five-pound note, in England, is always a note of the Bank of England, and it is always worth its face value in gold.

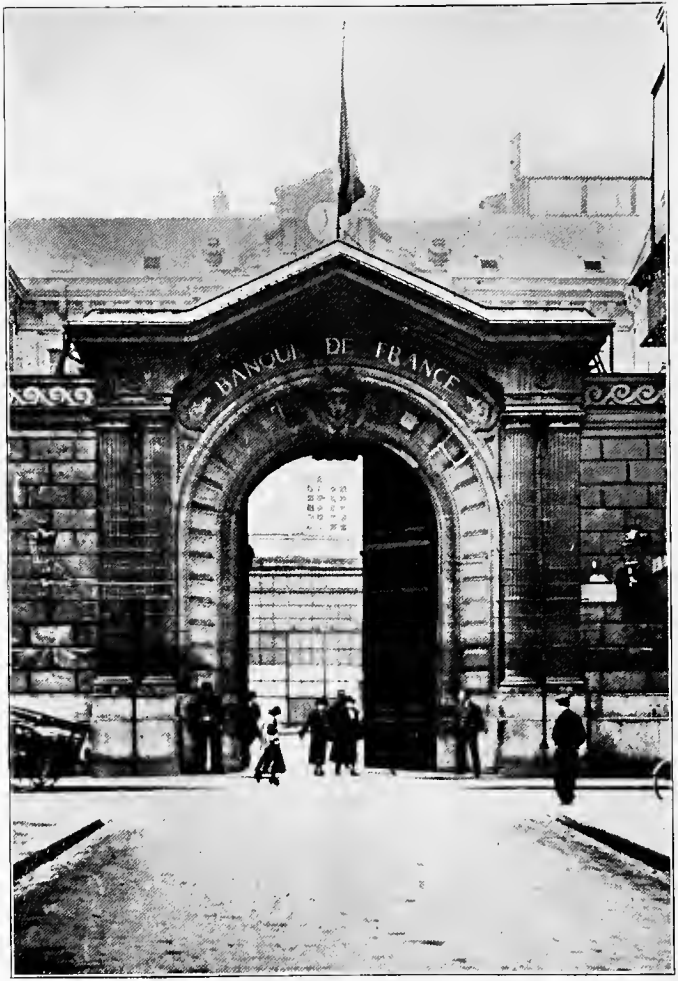
As a consequence of the growth of joint-stock banks throughout England, the Bank of England has come to be mainly a bankers' bank. All the banks keep deposits with the Bank of England as reserves against their own deposits. From time to time these banks take their paper to the Bank of England for *rediscount.* That is, finding their own balances lower than they think they should be, they ask the Bank of England to loan on the commercial paper that they have made advances on. In order to protect its own deposits, the Bank of England raises its discount rate. In turn the borrowing banks raise their own rates and thus check the borrowing by their customers. So widespread is the influence of the Bank of England that the raising and lowering of the discount rate is regarded as the great barometer of trade. The Bank maintains branches, manages the public debt, receives the government reserves, and makes payments for the government. In addition the Bank issues notes which are limited to the amount of bonds deposited with the issue departments—some £70,000,000. Beyond this amount the Bank must have gold for all notes issued. Sometimes the parliamentary act which limits the issue of notes is suspended by Parliament, as in time of panic or great financial difficulty, which was the

case during the World War, when the Bank was of the greatest service to the government.

THE BANK OF FRANCE

104. Character of the bank. The Bank of France, founded by Napoleon I in 1800, is the most democratic bank in the world and the largest bank of issue. It was founded to bring together those people of France who had money to lend and those who wished to borrow money to use in commerce and industry; and in this respect it is very different from the Bank of England, which is almost wholly a bank of banks. The Bank of France is a bank of banks and a public, or people's, bank as well. It lends the large borrower five million francs with the same facility that it lends five francs to the small borrower; and it discounts large and small notes, charging the same rate for both. Hence it is very popular with the people of France, who have become one of the most thrifty nations on the earth largely because of this bank's services to manufacturers, capitalists, merchants, small traders, and farmers.

105. Strength of the bank. The first bank of issue in France was founded in 1716 by John Law, a Scotchman, the author of the Mississippi Scheme, the most disastrous financial speculation ever known in Europe. This bank came to an end in a few years, and was followed by others, none of which had any permanent strength. The Bank of France, however, seems to have all the elements



The Bank of France

of permanence, grounded, as it is, in the interests of the people themselves. For the convenience of the public it has six hundred branches throughout the country. While its deposits are not so large as those of the Bank of England, it keeps great sums of gold and silver in its vaults, against which there is issued paper money, the only notes used in France, for the bank has the exclusive right of issue. So great is the stability of the institution that it has weathered the most trying times of financial stress that France has ever known. In 1848 there was a revolution that overthrew the government but not the bank. In 1870 the ease with which it paid the huge war indemnity of five billion francs astonished the German people, and it gratified its own supporters by going through the reign of the Commune without serious difficulty In these days, after the World War, it is doing its share in reëstablishing the financial security of France.

DEVELOPMENT OF BANKING IN THE UNITED STATES

106. Gold reserve. Before beginning this topic it will be well to make sure that the student has a clear understanding of a very important matter: the necessity of *bank notes*—that is, paper money secured by gold and silver, or gold alone, in the Treasury of the government. This fact has been mentioned incidentally, but not commented upon.

If a man who had a salary of one hundred dollars a month, and, perhaps, owned his own home, should

ask you for a loan of fifty dollars, you would be inclined to lend him the money if you had confidence in his integrity. But if he should ask you for a loan of fifty thousand dollars, you would refuse, because you would know that, no matter how great his honesty, he never could hope to repay such a sum. It is the same with a government. At various times men have argued that the sanction of government makes money. There have been times in the history of this country, and in that of nearly every other country, that disprove this theory, for such disasters as wars, failure of crops, and decrease in industrial production have been followed by high, sometimes extortionate, prices. To say that prices are high is to say that money is cheap. Such a condition may have several underlying causes, but when the condition is extreme the main cause is likely to be lack of faith in the money of the country. But if, in times of stress, the people know that they can take their paper money to the bank, or to the national Treasury, and get metal money for it, financial conditions cannot become very bad, for metals have a value of their own, irrespective of governmental sanction. Even if a government should utterly fail and cease to be, its metal money would have value as bullion; while in the same case its paper money would have no more value than that of the paper itself.

The first office of the Philadelphia Saving Fund Society, the first savings bank in the United States

For this reason governments make metal money, usually gold, the basis of their circulating paper money, which is exchangeable for coined gold or silver. It is not always the case that a government has as much metal in its vaults as it has outstanding paper, but every government endeavors to have enough for perfect security. This fact should be kept in mind while you are reading the following pages.

107. Our early banks. There were a few banks in our old colonial days, but they were not very secure, partly because the men who conducted them knew little about banking and partly because they tried to issue paper money without adequate metal security. Such banking is merely speculative. These early banks had so little value that after the failure of Law's Mississippi Scheme the English government passed a law that no bank should exist unless it had a special charter, and the law was made to apply in the colonies as well as in the home country.

108. Robert Morris and the Bank of North America. Before the adoption of the federal Constitution there was much conflict among the states as to the policies to be pursued, and great hesitation on their part in granting needed powers to the central government for an effective administration of its affairs. In consequence, there was no effective government. The states were jealous of their rights and jealous of one another, and not infrequently refused to obey the mandates of Congress, especially in the

matter of supporting the government in a financial way. This had been their history all through the Revolutionary War, and on this account Washington and his armies had suffered untold privations through lack of food, clothing, and munitions.

All of the states had been impoverished by the war; and in addition to the national debt there was a heavy burden of debt in each state. The collection of taxes rested with the states. Congress could determine the amount of revenue to run the government and assess each state its proportion of the sums needed; but, if any state refused to pay its portion into the national Treasury, Congress was powerless to force the collection. It could not coerce the "slacker" states, and, owing to this weakness, it could not get credit from abroad, though strong efforts in that direction were made. A stronger central government was needed, but there was very little disposition to give up states-rights to a central government.

In these trying times one man stands out above all others — Robert Morris of Philadelphia, a wealthy and unselfish patriot, known as the "Financier of the Revolution." He became superintendent of finance of the Confederation, and in 1781 established the Bank of North America[1] in Philadelphia with a capital of $400,000, under the authorization of

[1] This bank is still in existence. When it was absorbed into the national bank system in 1863, it requested, and obtained, from Congress the right to retain its ancient name unchanged. It is therefore the only national bank in the country whose name does not include the word "national."

Congress. There being much doubt as to the right of Congress to authorize the establishment of a bank, Morris obtained a charter from Pennsylvania, under which the bank operated. Its purpose was to negotiate loans for the government, and otherwise to act as its fiscal agent. It did much to help the government, lending it, through Morris as superintendent of finance, the sum of $1,249,975; but the situation was always one of dissension and controversy, and after several years Morris resigned his position to a finance board. It is worthy of mention that, from the beginning of the war to a period after the adoption of the Constitution, his credit was greater than that of the government. He owned much of the western half of New York, two million acres in Georgia, and another million in Virginia, South Carolina, and Pennsylvania. Yet from 1798 to 1801 he languished in a debtors' prison—a tragic experience for one to whom our country owes so much!

109. Alexander Hamilton. Finally, in September, 1788, the Constitution was adopted—according to John Adams, as "a grinding necessity from a reluctant people." They had had so much bitter experience with the autocratic German king of England and his Tory government that they feared to place themselves again under a central authority for fear that it, too, might become tyrannical.

The following year Washington was inaugurated and, in recognition of the services of Robert Morris,

The present Bank of North America, the first national bank in the United States

offered this able financier the office of Secretary of the Treasury. Morris declined, but suggested the appointment of Alexander Hamilton, one of the most important figures in American history. Born a British subject on an island in the West Indies, he had come to New York to complete his education, and, coming to sympathize with the colonists, he determined to cast his lot with them. He studied law, wrote and spoke on subjects of finance, fought in the Revolution—serving on Washington's staff and afterward as a field officer—and by his contributions to *The Federalist* did more than any other person to secure the adoption of the Constitution. This was a good record, and Washington made Hamilton his Secretary of the Treasury.

Hamilton proved to be one of the great constructive minds of the early Republic. He organized the Treasury Department with consummate ability, prepared an elaborate report on the public debt, and recommended that bonds be issued not only for the payment of the national debt, but also for the debts of the states, amounting in all to about seventy-five millions of dollars. His recommendations met with strenuous opposition, but he argued, with great effectiveness, that it was bad faith for the government to compromise any part of its debt, and that if in the future the credit of the nation was to become strong the record of the government for keeping its promises must be unblemished.

110. The Bank of the United States. Having won this fight for the raising of revenue and establishing confidence in the financial integrity of the new government, Hamilton now proposed the organization of a national bank with a capital of ten millions of dollars, one-fifth to be taken by the government and four-fifths to be subscribed by the public. Again there was opposition. It was argued by Jefferson and others that the Constitution had not given Congress the power to establish a national bank. Hamilton argued, on the other hand, that Congress had a constitutional right to do anything not forbidden by the Constitution if it would "promote the general welfare," and that a United States bank would do just that. Banks, he said, augment the productive capital of a nation, for gold and silver alone are not enough as instruments of exchange, but, deposited in a bank, they become the basis of a paper circulation of two or three times their value, and thus work for borrower and lender. Besides, he pointed out, there were the further advantages of the government's being able to borrow from the bank in time of need, and of the individual's being able to borrow for the prompt payment of taxes and other needs.

Hamilton won his case. The bank was granted a charter for twenty years, and was established in Philadelphia, with branches in all the principal cities of the country. It did a general business and acted as fiscal agent for the government. The

issue, or notes, supplied a sound national currency which was received for all debts, taxes, and duties, and was accepted on a par with gold throughout the world. As a result of Hamilton's wisdom, credit was restored, trade expanded, and distrust vanished.

111. The second charter. The charter of this first national bank expired in 1811. The refusal of the Republicans (now Democrats) to grant a new charter on account of the old-time prejudice against a government bank, and at the time when the government needed an efficient agent, threw the money condition of the country into great confusion. Bank notes which it had supplied were withdrawn, and a currency issued by state banks took its place. The fatal defect of this paper money was that the banks had insufficient gold with which to redeem it, and there was no penalty attached to a refusal to redeem, nor any effective check to prevent an issue of bills greatly beyond the legal limit. As a result state-bank currency began to depreciate greatly in value, and during the War of 1812 many banks were forced to "suspend specie payment," or payment in coin, altogether. Economic distress and great derangement of business followed as a natural consequence.

Finally, in April, 1816, a bill to create a Second United States Bank was passed. Its capital was to be thirty-five millions of dollars, and, as before, one-fifth of the stock was to be taken by the government

and four-fifths by the public. The bank was again established in Philadelphia, with branches as before. Government funds were deposited with it, and a sound currency was again issued. Extraordinary development of the country followed, and lasted until the second term of Andrew Jackson's administration, when the charter expired.

112. Jackson and the bank. In Jackson's time, as in the days when the Constitution was being considered for adoption, the people had great fear of too great concentration of power in the hands of any one group of people. The bank seemed such a power. People feared it as they feared the trusts a few years ago. They said it was a monopoly, and that it benefited the rich at the expense of the poor. As Jackson shared these sentiments, and as, further, he believed that the constitutionality of the bank was seriously doubtful and that it did not provide a sound and uniform currency, he vetoed the bill to grant the bank a new charter and took the government's deposits from it. Thus ended the existence of the Bank of the United States.

Within two years from the time of the expiration of the charter the bank had wound up its affairs as a national institution, but it was rechartered under the laws of Pennsylvania and led a precarious existence for several years more. Its immense circulation under its national charter, more than twenty-three millions, was all paid off; its deposits were returned; the government received again the

value of its one-fifth of the stock; but the stockholders of the other twenty-eight millions lost all.

113. State banks of issue. The experiment of state banks of issue was again tried, and government funds were deposited in them in the hope that such confidence on the part of the government would encourage them to establish a sound currency. This hope failed. Great business derangement followed, and lasted during the rest of Jackson's administration and also through the entire administration of his successor, Van Buren. This was what was called the Panic of 1837. Its intensity was increased by an extravagant speculation in land which had been going on for some years. People bought land with notes of state banks — many of which had no real capital — held it for a short time, sold it, and reaped handsome profits; and in this way the paper of the "wild-cat" banks, as they were called, was disseminated widely, especially in the West. Jackson, who had always believed that government had no right to make legal tender any money but gold and silver, in July, 1836, issued his famous "specie circular" in which he required that payment for public lands be made in specie or in notes of specie value. Naturally enough, people who had payments to make rushed to the banks to get the metal money, but little of it was to be had. Many banks suspended specie payment without seeming to make an effort to pay in coin. Many mercantile failures occurred, involving losses of millions of dollars;

credit was again paralyzed, the government money deposited in the so-called "pet banks" was lost, labor was thrown out of employment, prices declined, and bread riots occurred. Some of the states even repudiated their bonds.

114. The free-banking system. From 1838 to the Civil War period the state banks continued to operate, but under a plan called the *free-banking system*. New York began it, and it was successfully carried out in that state and in New England, Ohio, Indiana, and Louisiana, the Indiana bank being especially successful. Bankers had learned that it was positively dangerous to attempt to conduct business without having some sort of reliable security for their paper-money issue, and now the plan was to own and hold as security various kinds of public bonds. These gave the public confidence, and the result was that the banks weathered another financial crisis in 1857 without any such calamities as happened in 1837. A noteworthy thing about the free-banking system was that it laid the foundation for the national bank system of the Civil War period.

State banks were, nevertheless, a failure, largely because of the many kinds of currency they issued. It is said that over seven thousand kinds were issued by these institutions. When a merchant in North Carolina or Louisiana sold goods and was offered in payment bills of banks in New York or Illinois or Kansas, he had no way of knowing whether or

not the banks that had issued the bills were sound. This uncertainty prevailed everywhere. Clearly a good national bank system was needed.

115. The national bank system. At the outset of the Civil War, Salmon P. Chase, Secretary of the Treasury, found it difficult to sell at a sufficiently high rate the bonds issued for the conduct of the war. In addition the variety of currency in circulation was a hindrance to government finance. He therefore proposed a national bank law, founded largely upon the free-banking system, which was authorized by Congress in 1863. It provided that any body of men desiring to establish a national bank would have to buy United States bonds of a value not less than one-third of their capital stock and not more than the total value of such stock. These bonds were to be deposited with the Treasurer of the United States, and in return the bankers would receive from the government bank notes whose value would be 90 per cent of the par value of the bonds.[1] This plan gave in time, as the banks were established, a real uniformity to currency all over the country.

At first the law did not have so great an effect on the price paid for bonds as Mr. Chase desired, and an addition was made which went into effect in 1866, providing for a tax of 10 per cent on the paper money of state banks. This compelled the

[1] National banks are now permitted to issue $100 of circulating notes against a deposit of $100 of United States bonds. See chapter iii, "National Bank Currency," page 69.

state banks either to cease issuing paper money or to become national banks; and thereafter the national banks were the important banks of the country, and so remain to this day. It is in coöperation with them, and others privileged to join, that the highest development of banking science has been attained in our Federal Reserve System.

Questions for Discussion

1. How did banking in England begin?
2. How did the Bank of England begin? To whom did it lend its money?
3. What is its chief business? Its standing?
4. What advantages has it over other English banks?
5. What is the secret of its success?
6. Why is the Bank of France called "democratic"?
7. Look up the "Mississippi Scheme," or "Mississippi Bubble," or "John Law" in the encyclopedia, and determine what the famous scheme had to do with banking.
8. What difference do you find between the Bank of France and the Bank of England?
9. Why is a gold reserve important for any nation?
10. Were early American banks sound or not? Why?
11. What did Robert Morris do for banking in our country?
12. Why was a sound banking system much desired in his day?
13. What do you know of the Bank of North America?
14. What did Alexander Hamilton propose for a financial policy for our youthful nation, and what did he have to do with the development of a banking system?

15. What was the objection to establishing a Bank of the United States? Was the bank a success?

16. Why was the second charter not immediately granted? Was the bank a success when finally rechartered?

17. What were Jackson's feelings toward the bank?

18. What did he do with regard to it?

19. What were "wild-cat" banks? How did the country thrive in their time?

20. Explain the "free-banking system."

21. What did Salmon P. Chase have to do with developing our banking system?

22. Why do governments make metal money the basis of their circulation?

CHAPTER VII

THE FEDERAL RESERVE BANKS

PURPOSE AND ORGANIZATION

116. Purpose of the banks. In the *Fourth Annual Report of the Federal Reserve Banks* Mr. W. P. G. Harding, governor of the Federal Reserve Board, said:

> The Federal Reserve System is today the ultimate resource of the business and financial community, and its position as such is unquestioned. . . . Every step taken and every policy decided upon must be with the view not only of maintaining and strengthening the financial position of the country in these critical times, but also of providing for the readjustments which must follow the war.[1]

This clearly states the purpose of the banks, and makes it plain that they are worthy of the hearty support of the people.

117. Banks and districts. There are twelve Federal Reserve Districts. Each district has its own Federal Reserve Bank, and each is officered and directed by men in the district in which it is located. The wisdom of this plan is apparent, for home managers are naturally more familiar with the needs of their home districts than managers selected

[1] From the *Fourth Report*, 1918, covering operations for 1917.

from the outside could be. The twelve banks, with their branches, however, are practically one institution under one organization, controlled by the central direction of the Federal Reserve Board at Washington. Collectively they comprise the greatest and strongest banking organization the world has ever seen.

The following are the Federal Reserve cities: (1) Boston, Massachusetts; (2) New York, New York; (3) Philadelphia, Pennsylvania; (4) Cleveland, Ohio; (5) Richmond, Virginia; (6) Atlanta, Georgia; (7) Chicago, Illinois; (8) St. Louis, Missouri; (9) Minneapolis, Minnesota; (10) Kansas City, Missouri; (11) Dallas, Texas; (12) San Francisco, California. In each city is a bank which serves the surrounding district. Branch Federal Reserve cities at present are as follows: Baltimore, Maryland; Buffalo, New York; Birmingham, Alabama; Cincinnati, Ohio; Detroit, Michigan; Denver, Colorado; El Paso, Texas; Helena, Montana; Houston, Texas; Jacksonville, Florida; Little Rock, Arkansas; Louisville, Kentucky; Los Angeles, California; Memphis, Tennessee; Nashville, Tennessee; New Orleans, Louisiana; Omaha, Nebraska; Oklahoma City, Oklahoma; Portland, Oregon; Seattle, Washington; Spokane, Washington; Salt Lake City, Utah.

Federal Reserve cities are designated by the Federal Reserve Board. They are selected because of their importance, and are more likely to be cities in whose banks some smaller member banks carry

credit balances, or deposits. There are also central Reserve cities, which are the larger financial cities.

118. Organization and management. It would require a very large book indeed to describe in detail everything pertaining to the organization, management, and operations of the Federal Reserve Banks and the part they took in financing the World War, now happily ended. We can therefore touch only on their salient features.

The Federal Reserve Banks are banks of banks. They receive deposits from member banks and from the government, but have no direct dealing with the public.

Their capital stocks are owned by all the national banks of the country, and by all other state banks and trust companies[1] that qualify for membership. Every member bank is required to subscribe to an amount of Federal Reserve stock equal to 6 per cent of its own capital and surplus. Only half of this stock has ever been called for, and it is probable that the other half will never be called, as it does not appear to be needed.

The capital stocks of the Federal Reserve Banks fluctuate. When a member bank increases its capital or surplus, it is required to subscribe for an

[1] All national banks are required to be members, and eligible state banks and trust companies *may* become members with the approval of the Federal Reserve Board. Their statutory rights are not interfered with. Their application for membership is accepted upon having a paid-up and unimpaired capital stock equal in amount to that which would be required of a national bank in the same place, and upon meeting certain other tests, a full description of which may be had by reference to *Questions and Answers on the Federal Reserve System*, published by the Federal Reserve Bank of Richmond, Virginia, pages 60–74.

additional amount of Federal Reserve stock equal to 6 per cent of such increase—only 3 per cent being immediately called, for the reason given above. On the other hand, when a member bank goes out of business, it is required to surrender its stock altogether. Upon such surrender it will receive payment at par for all of its stock, which is at once canceled.

Member banks are entitled to receive 6 per cent in dividends upon their holdings of Federal Reserve Bank stock, and no more. After the surplus of a Reserve bank equals 100 per cent of its capital, all earnings above the 6 per cent required for dividends go into the National Treasury at Washington, as a franchise tax. As the surplus earnings in several of the Reserve Banks are now over 100 per cent, the revenue to the government will shortly be a substantial sum.[1]

Every member bank is required to keep on deposit with its Federal Reserve Bank a certain percentage of its deposits. This percentage is fixed by law. A bank not in a central or a Reserve city must deposit 7 per cent of its demand deposits[2] and 3 per cent of its time deposits.[3] A bank in a Reserve

[1] The law has been lately amended, so that now Federal Reserve Banks are allowed, after a 100 per cent surplus has been established, to retain 10 per cent of additional surplus earnings, after the payment of the current dividend. The remainder of such earnings is to be paid to the government as a franchise tax.

[2] *Demand deposits* are those deposits made with the bank by depositors which may be withdrawn at the will of the depositor—on *call* or *demand*.

[3] *Time deposits* are those deposits made with the bank by depositors, at interest, repayable only on prior notice to the bank, as agreed upon, usually on fifteen or thirty days' notice.

city must deposit 10 per cent of its demand deposits and 3 per cent of its time deposits. A bank in a central Reserve city must deposit 13 per cent of its demand deposits and 3 per cent of its time deposits. For these deposits the Federal Reserve banks pay the member banks no interest, and as these member banks now number several thousand their deposits in the Federal Reserve Banks amount to many hundred millions of dollars.

WORKING OF THE FEDERAL RESERVE SYSTEM

119. What the Reserve Banks do. The Reserve Banks act as depositories of government funds and as the fiscal agent of the government. They also act as depositories for one another and for member banks, and have the power to establish accounts abroad for exchange purposes. Other functions are: (*a*) Rediscounting of commercial paper for periods of not over ninety days, including acceptances. When a merchant or manufacturer sells goods, he wants his money; but as sales are made on time, he cannot get his pay until the time elapses, unless the banks advance it on the bill. Under the Federal Reserve Act such a bill marked "accepted" by the purchaser becomes negotiable paper and banks can then discount it. When member banks need more funds, they take their acceptances to the Reserve Banks and obtain loans on them. This is called rediscounting. (*b*) Making loans to member banks.

(*c*) Establishing rates of discount from time to time as determined by the Reserve Board. This was a function of great importance in the operation of the Bank of England. (*d*) The issue of the Federal Reserve notes when secured by bonds, under the same conditions as those applying to national banks. These banks may issue other notes dollar for dollar against gold and also other notes against commercial paper in its possession, providing it maintains a reserve of 40 per cent. (*e*) The banks may deal in securities, sell bills of exchange, and engage in other banking functions.

120. Federal Reserve Banks and the war. The Federal Reserve System is the fiscal agent of the United States Treasury and had great influence in floating the various Liberty Bond issues. Mr. Charles A. Peple, deputy governor of the Federal Reserve Bank at Richmond, Virginia, writes thus about the matter in a personal letter to Mr. W. E. Borden:

Without some such machinery as was found already in existence in the Federal Reserve Banks, our war loans could not have been floated; indeed, many well-informed people are confident in the belief that without the Federal Reserve System this country could not have fulfilled its part in the great conflict between liberty and justice on one side, and autocracy and oppression on the other.

Before the Federal Reserve System was established, each bank had the duty of maintaining its own reserve either in cash in its vaults or in the shape of immediately

available balances in other banks. This system worked very well in ordinary times and under ordinary conditions, but whenever trouble arose, whenever there was a disposition, from necessity or from some other cause, on the part of depositors, generally, to withdraw their funds, much larger reserves were needed. Consequently, when such a condition was anticipated, it became the imperative duty of every bank to pull up and increase its reserve, not only beyond the usual limit, but to whatever point the officers of the bank felt was necessary for safety.

In addition to this, with every bank responsible for its own reserve, with every one anxious to increase its reserve by getting hold of as much cash as possible, every bank became more or less an Esau, with his hand against every man, and every man's hand against him; the logical, inevitable consequence being that troubles accentuated themselves, increased by multiplication.

Broadly speaking, the Federal Reserve System was devised in order that the reserves of all banks might be pooled in one fund, and that each bank might have the privilege, under proper conditions and restrictions, of drawing on that fund in time of need, whether its necessities were much or little.

Every member bank, therefore, can carry out its business engagements with absolute confidence. It can afford to operate with a mimimum reserve, knowing that if anything unexpected happens it has its Federal Reserve Bank to fall back upon.

As will be seen, then, ... the principal feature of the Federal Reserve System is nothing more nor less than a system of intelligent coöperation among the banks.

The public already appreciates this fact to a considerable extent, and is appreciating it more clearly every day.

Before the advent of the Federal Reserve System, the financial system of the country, in times of exigency, could not minister to ordinary domestic needs. Today, besides taking care of these, the United States has bought back from foreign nations in excess of three billion dollars of American securities, has loaned foreign countries eleven billion dollars for purposes of war, has floated on government account eighteen billion dollars of Liberty Bonds and War Savings Certificates, not to mention the billions of dollars of treasury certificates of indebtedness issued in anticipation of Liberty Loans.

The Federal Reserve Banks, collectively, constitute a haven of refuge to which its member banks may go in time of stress, in full confidence of protection if their own affairs have been managed honestly and intelligently. Indeed, it is now the mature judgment of many political economists and men of affairs that it is impossible ever again for this country, under the Federal Reserve System, to have another money panic such as we had on "Black Friday"[1] or, indeed, in the trying times of 1897.

[1] In 1869, just after the Civil War, the United States government passed an act promising to pay all the obligations of the government in coin, except in particular cases where the law provided otherwise. This sent gold to a premium, and certain speculators endeavored to create a "corner" in gold; that is, to get so much of the gold of the country into their possession that they could reap a great profit from its further increase in value. In order to prevent such speculation, President Grant ordered the sale of gold from the United States Treasury. This brought down the price of gold with a rush, and so severe a panic occurred on Wall Street on September 24 that the day was called "Black Friday."

121. A lesson in coöperation. The gratifying success attained by the coöperation of the banks in the Federal Reserve System, which have built a practically impregnable banking organization, illustrates the high degree of perfection which may be attained in any enterprise by intelligent coöperation. It drives the lesson home to us that "no man lives to himself alone," that each one of us is dependent upon others, and that we individually succeed according to the measure of intelligent coöperation we give and receive.

If, therefore, you have confidence in the management of the banks of your community, give to the one of your choice your fullest support. If you know of any hidden, idle, or unproductive money, use all your influence to get it into a good bank, so that it may coöperate with the dollars already there busily at work in upbuilding your community. We now have a prosperous country; but if we could bring about the same intelligent coöperation between all the individuals and our banks that we have between the banks themselves and the Federal Reserve Banks, we should have a favored country, the like of which has never been seen upon the face of the earth.

As has already been demonstrated in previous pages of this book, our banks are our most important vehicles of commerce, and they are our most helpful agencies in the struggle for material well-being. It is of the highest importance, then, that

every man should become familiar with correct methods in dealing with his bank, to the end that he may not only get the best service for himself, but that he may serve his community as well by giving his full coöperation to the bank of his choice, which in turn will serve the community.

122. Volume of business. If you have some paper money in your pocket, inspect it to see just what the bills are. On some you will find the words, "Secured by United States Bonds or Other Securities." These are national bank notes. On others you will find the words, "United States Note." These are issued by the Treasury Department. On very many of them you will find the words, "Federal Reserve Note," or "The Federal Reserve Bank of New York," or some other similar caption. These, of course, are the paper money issued by the Federal Reserve Banks, and the amount of them in circulation is enormous. On the fourth day of July, 1919, the Federal Reserve Bank of New York had a note circulation of $762,915,000, while its gold reserve was $656,095,000, and its total resources were $1,818,155,000. New York's, of course, is the largest of the Reserve banks, just as New York is the largest of our cities, but the banks of the other Reserve cities also do a large business, that of Chicago coming second.

Questions for Discussion

1. What is the purpose of the Federal Reserve Banks?

2. How many of these banks are there in the country? Where are they? Do you consider their distribution a good one geographically?

3. How is the capital of the Federal Reserve Banks determined?

4. Who are their depositors?

5. What dividends do they pay?

6. What becomes of their surplus earnings?

7. What are the functions of the Federal Reserve Banks?

8. What part did the banks play in financing the war?

9. Illustrate the value of intelligent coöperation.

10. What constitutes the highest development of banking science today?

11. Investigate by independent inquiry how the circulating notes of the Federal Reserve Banks are secured.

CHAPTER VIII

THE FEDERAL FARM LOAN BANKS

PURPOSE AND ORGANIZATION

123. Purpose of the Farm Loan Banks. The *Federal Farm Loan Banks* were brought into being for the specific purpose of assisting the farmer. They endeavor to encourage coöperative effort among the farmers, to afford them credit through long or short terms of years, to lower and equalize interest rates, and to promote thrift by helping the tenant farmer to own the land he cultivates.

124. The establishing act. The Federal Farm Loan Act was approved by Congress on July 17, 1916. The act provides for the establishment of twelve Federal Loan Banks to be located in different parts of the country so that their services may be accessible to every farmer in the United States.

125. Administration. The administration of the act is in the hands of the Federal Farm Loan Board of the Treasury Department. This is in reality a board of directors, and is composed of five members appointed by the President. The Secretary of the Treasury is the chairman by virtue of his office.

126. Duties of the board. The Federal Farm Loan Board of Directors is responsible for the

general conduct of the entire Federal Farm Loan System. It determines the location of the twelve banks (usually called the *Federal Farm Land Banks*); it names the first set of directors, which are subordinate to it, for each of the twelve banks and supervises all the bond issues for them.

127. Capital stock. The twelve banks begin with a capital of $750,000 each. The capital stock is first offered to the public, and the government subscribes for such of it as the public does not take. The banks lend this capital to farmers or to prospective farmers, and each bank gets additional money to lend by the sale of its bonds and by an automatic increase of its capital from the sale of its stock to the many *Local Farm Loan Associations*.

128. Lending capacity. The lending capacity of the banks is practically unlimited. To illustrate:

When a bank has loaned $50,000 and has taken $50,000 of first mortgages to secure the loans, it may then issue $50,000 of bonds against these mortgages to produce another $50,000 to lend to farmers. This process is repeated over and over until the capital is turned over twenty times.

Now if the capital of the bank were limited to $750,000, it would have a lending capacity of $15,000,000, but the law provides for the automatic increase of the capital of the bank because each Local Farm Loan Association is required to buy stock in the Federal Land Bank equal to 5 per cent of its loans.[1]

[1] From a personal letter from D. A. Houston, president of the Farm Land Bank at Columbia, South Carolina, to Mr. W. E. Borden.

Since a Federal Land Bank is permitted to lend twenty times its capital, it will be observed that as $1,000 is added to the capital the lending capacity is increased to $20,000, and the ratio between the capital and the lending capacity always remains the same. There is no limit, therefore, to the capacity of the bank to serve the needs of farmers so long as it can sell the bonds.

METHOD OF OPERATION

129. How loans are made. The farmer borrows money from the Federal Land Bank located in his district by applying for membership in the nearest Farm Loan Association. If there is no such local association near him, he should find ten or more farmers or prospective farmers in his community who wish to borrow, and with them form an association. When they have secured and filled out the blanks provided by the Federal Farm Loan Board at Washington, the Federal Farm Land Bank of the district will send its appraiser to inspect the security, and if this is satisfactory the loan will be authorized when the charter is granted to the local association.

130. The local association. The local association has a loan committee of three members who must agree unanimously upon the valuations of farm lands offered as security for the loans desired, and their valuations must be confirmed by the appraiser of the Federal Land Bank of the district.

No one farmer may borrow more than $10,000 nor less than $100. The loans are limited to $10,000 so that the bank's money may not be used for the purposes of monopoly. Fifty per cent of the value of the land may be borrowed, and 20 per cent of the permanent insured improvements. The loans run from five to forty years to suit the borrower. The interest and principal are payable in equal installments either annually or semiannually during the specified life of the loan.

No Farm Loan Association may begin business with less than $20,000 in loans.

131. Rate of interest. The rate of interest to be paid by the farmer depends upon the rate of interest at which the bonds of the bank sell. If these sell to yield a rate of 4 per cent, the rate to the farmer cannot exceed 5 per cent as provided by law. In no event may the rate exceed 6 per cent.

132. Borrower must buy stock in the local association. The borrowing farmer is required by law to buy stock in his local association equal to 5 per cent of the money he borrows. This stock is held by the local association as additional security until the farmer pays his debt. It is then returned to him, or he may use it to make the last payment of his note. The local association uses the money thus obtained to purchase stock in the Federal Land Bank in order to increase that bank's capital. Thus the payment of every loan increases the Land Bank's power to lend.

133. Liability of stockholders. There is a liability in owning this stock. As it is a part of the assets of the local association, it may be used to cover losses made through bad loans. In case of severe losses by the association, there is an additional liability on the part of the borrowing farmer stockholder equal to 5 per cent of the amount he borrows.

There is very little likelihood, however, that the borrower will ever suffer from such liability, as all loans are carefully appraised, and made only to the extent of 50 per cent of the value of the land. In no event can the borrower become responsible for the debts of the other members of the association for a greater amount than 10 per cent of the face of his own loan. While the liability here is very remote, it nevertheless accentuates the necessity of careful management by the local association and demonstrates the reason for such liability.

134. Default in making payments. If, in the judgment of the local association, a default in payment is unavoidable, the association may carry the borrower over, but the latter is required to pay 8 per cent interest on such overdue payments while he is in arrears.

135. What the land banks have done. Up to October 31, 1919, the total amount of money lent to the farmers of the United States by the Federal Farm Land Banks was $271,317,816, and the number of farmers accommodated was 103,672. As the system has been in operation less than three

years, it would seem that it will have a wide field of activity.

136. The bonds as investments. The bonds of the land banks are free from all kinds of taxation, and are secured by first mortgages against the farms, the appraised value of which is twice as great as the obligations against them. In addition, the entire assets of the twelve Federal Land Banks are behind the bonds of all the banks, plus the 10 per cent liability of all the borrowing stockholders. The bonds are issued in denominations of $25, $50, $100, $500, and $1,000, and should appeal particularly to the thrifty farmer.

137. Joint-stock land banks. *Joint-stock land banks* are financed by individual stockholders, who are limited as to possible profits as well as to the total amount of business permitted. They operate under the same act which established the Federal Farm Loan Banks. Complete information concerning their organization and operation may be had upon application to the Treasury Department at Washington.

Questions for Discussion

1. What is the purpose of the Federal Farm Land Banks?
2. When was the act creating them made a law?
3. By what machinery is the Farm Loan Act applied?
4. What determines the location of these banks?
5. What is their capital? How is it derived?

6. How does a Federal Farm Land Bank get additional capital to lend?

7. What becomes of a farmer's stock when he pays off his loan?

8. Who governs directly these Federal Farm Land Banks?

9. How is a local association formed?

10. Who passes on the value of the security offered?

11. What are the maximum and minimum loans to one farmer?

12. What is the object in limiting the loans?

13. What percentage of the security value may be borrowed?

14. How long do the loans run? What interest do they bear?

15. What is the liability attached to owning stock?

16. If a borrower fails to pay his loan when it becomes due, what happens?

17. Are the bonds of these banks good investments?

18. If so, why? How are they secured?

19. Is the income from these bonds free from taxation? If so, to what extent?

20. Does the government guarantee the bonds?

21. In what denominations are they issued?

CHAPTER IX

THE TREASURY AND THE MINTS[1]

ORGANIZATION AND FUNCTIONS OF THE TREASURY

138. The United States Treasury. The Treasury Department was established by act of Congress in 1789. It grew in importance and complexity, but did not have a permanent housing for many a long year. The present stately building in which the business of the department is conducted was begun in the administration of Andrew Jackson. It seems that for a long time there was uncertainty as to a choice of location for the building, and the bluff old President one morning gave his cane a vigorous poke into the ground and said, "Build it here." And so they did.

It is an impressive structure, having the appearance of a temple. Behind its great stone columns and heavy walls a tremendous business is conducted. The Secretary of the Treasury works here, with his assistants and other officers performing the functions of Chief Clerk, Chief of Appointment Division, Chief of Bookkeeping and Warrants, Chief of Public Moneys, Chief of Customs, Chief of Division of Printing and Stationery, Chief of

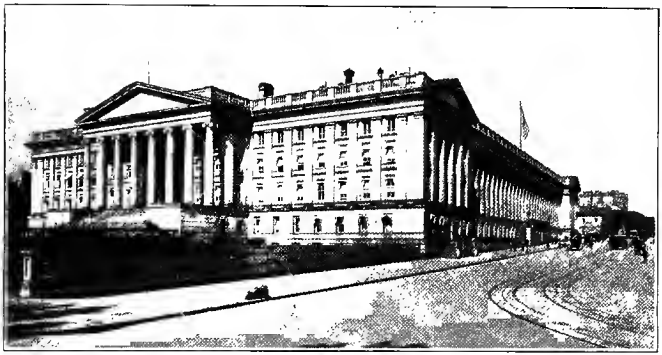
[1] It will be understood that this account of the Treasury Department and the mints is very brief and incomplete. A complete account would require a book by itself.

Loans and Currency, Chief of Mail and Files, and Chief of the Secret Service. Here also, or in auxiliary buildings, with their various assistants, are the Supervising Architect, the Commandant of the Coast Guard, the Register of the Treasury, the Comptroller of the Treasury, the auditors of the various departments of the President's cabinet, the Treasurer of the United States, the Comptroller of the Currency, the Commissioner of Internal Revenue, the Director of the Mint, the Surgeon General of the United States, the Governor of the Federal Reserve Banks, the Executive Officer of the Federal Farm Loan Bureau, the Director of the Bureau of War Risk, and the Director of the Bureau of Engraving and Printing.

139. Kinds of work done. This long list of officers will give some idea of the various kinds of work that go on in the Treasury Department. All the financial affairs of the United States government are conducted by it, including the collection of revenues from imports, the collection of internal revenue, the auditing of the government's accounts, the payment of government officials, disbursements for improvements made by the federal government, the handling of banking affairs as previously explained, the printing of currency, and a number of other affairs not directly related to the Treasury Department but nevertheless included in its activities, such as the coast guard service, hospital service for the army and navy, and the government's

architectural work. These last give the impression of bad organization, because of their lack of relatedness to the proper function of the Treasury Department, and in course of time they may be transferred to other departments.

140. The printing of currency. Visitors daily throng the Treasury Building and its various branches. They cannot help being impressed, first,



The United States Treasury Building at Washington, D.C.

with the vastness of the business transacted there, and, second, with the infinite precautions against error in the handling of money. In the Bureau of Engraving and Printing, for example, besides preparing various forms, such as military and naval commissions, the workers engrave and print money, bonds, and postage stamps; and the most minute and exacting care is taken to prevent errors and thefts. Consider, for example, the matter of currency. In a room of the bureau one sees engravers

at work making plates for bills of the various denominations. They work under guard, and at night the unfinished plates are put into a vault to remain until the next day. When a plate is finished, it is not used for the printing of the bills, but replicas are taken from it and the printing is done from these. For in case an accident happens to the original plate, it would be necessary to make another, and the duplicate could not possibly be exact enough to stand the microscopic test. It would follow that bills printed from the original and from the duplicate would not be precisely the same, and the difficulty of detecting counterfeits would be appreciably increased.

When the replicas are ready for the press they are locked in forms of four, and the printing begins. A silk-fibered paper, made in the only factory that knows the secret process, is used, and the sheets when they arrive are counted with minute care by person after person, and even in the presence of the pressmen who are to handle them, and the countings recorded. Again they are counted when they come off the press.

Each morning a steel wagon, under guard, takes a large amount of the money, still unfinished, to the Treasury Building and delivers it to the Division of Issue. Here it is counted again and sent to the sealing room, where the "Red Seal" of the Register of the Treasury, together with the number of the bill, is stamped upon it by an automatic device.

Finally a machine cuts the sheets into four bills each, and the money, now finished, is counted five times and stored in a room provided for that exclusive purpose.

141. Redeeming money. You have already learned that banks send in to the Treasury old and worn money to have it redeemed with crisp, new bills (p. 110). This is one of the most interesting phases of the work done in the Treasury. Still the counting goes on with meticulous care. Counted carefully before leaving the banks, the money is counted again at the Treasury as soon as delivered by the express companies, is wrapped again in packages, and is marked with the initials of the counters. Now the bills go to a *canceling machine*, which cuts two holes in the upper half and two in the lower half of each one. A clerk now takes the packages, counts again, and checks his count against that of the person who made the previous count. Finally the bills are cut through, lengthwise, by a machine, and one-half sent to the Register and one to the Treasurer, under whose directions they are counted again and the countings checked against previous counts.

142. The macerator. Now comes the final disposition of the worn-out money, and this rises to the dignity of a ceremony. The central figure in the scene is the *macerator*—a huge receptacle of steel filled with water and interlacing knives. Its heavy lid is thrice locked; one key is held by the

Treasurer of the United States, one by the Secretary of the Treasury, and one by the Comptroller of the Currency. Each day the lid is impressively opened after being unlocked by the three key-holders or persons representing them, a mass of the canceled money is put in, and the lid is again locked. There is even a fourth person present, to represent the banks and the people of the United States. Then the grinding begins, and the old money is slowly reduced to pulp. At a given time the four representatives of the government, the banks, and the people again assemble and unlock a valve; the pulp pours out, and is sent again to the Bureau of Engraving and Printing, where it is made into bookbinders' board and sold to the trade.

143. Counterfeit money. During all this process there is constant vigilance, by experts, to detect counterfeit money, for the criminal class is always busy in an endeavor to simulate the bills printed by Uncle Sam. These persons have two serious difficulties to overcome—the specially prepared silk-fibered paper and the very fine engraving done by the government workers; the skill with which counterfeiters do their evil work often deceives the bankers, but not the experts of the Treasury. In many cases a single glance is enough to show that a bill is spurious; but in others expert means of detection must be used. If a bill is found to be counterfeit, it is returned to the bank that sent it in, and an effort is made to trace it to the person

who passed it. If he is found, he is in for a hard time unless his reputation is good enough to protect him. But whether the person who passed the bill at the bank is found or not, the matter is handed over to the Secret Service Bureau, whose members have the reputation of keeping constantly at the task of running down counterfeiters and other criminals who try to break federal laws.

THE MINTS

144. The work of the mints. The coining of money is not done in the Treasury, but in the various mints, which are at Philadelphia, Denver, San Francisco, and New Orleans, the one at Carson City having been closed years ago. The various metals used in the making of coin are bought by the government from the mines at established rates, and delivered at the mints in ingot form.

145. How money is coined. The method of coining will be described very briefly here. The successive processes are rolling into strips, cutting into blanks called planchets, weighing and filing, coining and milling, and again weighing.

In the first of these processes the ingots are put through rollers that change them into the form of strips that are approximately, but not exactly, the thickness of the coin to be produced. In order to get the exact thickness, the strips are pushed between vertical cylinders for another rolling and flattening. The strips are now sent to a machine

which cuts them into the disks, or planchets, from which the coins are made. There being some irregularities here, the blanks are weighed, and either filed down to the correct weight or, if they are too heavy for filing, sent back to be remelted. Next they go to the coining and milling room, where the disks are fed into a machine in which dies impress the design of the coin upon them and mill the edges. There is a final weighing, and those coins that do not come within the very slight margin of difference allowed are remelted.

Throughout these processes the same scrupulous care in counting is observed as in the case of paper money.

THE SUBTREASURY SYSTEM

146. The passing of the system. Up to 1920 the government of the United States maintained what were called *subtreasuries* in the larger cities of the country. These institutions acted as the agents the Treasury and kept on deposit the funds of the government. This system was the outgrowth of President Jackson's opposition to banks and the failures of the banks to maintain specie payments. As a result, President Van Buren was convinced that the Treasurer of the United States should keep and disburse the funds of the government. As a consequence, his recommendation to Congress was adopted in 1840. Some modifications were made in 1863, and the Treasurer was allowed to deposit some

of the government funds in banks. The system affected the reserves of the banks and through them the ability of the banks to make loans. Whenever the receipts of the government were greater than the expenditures, money was accumulated in the Treasury and the banks' reserves were diminished. The whole system was not in accord with the best banking practice, and this detrimental influence was removed when the Federal Reserve Banks were established in 1913.

Questions for Discussion

1. Take up the list of officers in the second paragraph of the first section, and try to determine their duties. Perhaps you have reference books that would be an aid.
2. Try to trace the adventures of a dollar bill from the time it reaches the Bureau of Engraving and printing as a part of a sheet of paper until it passes through the macerator. There is a good English theme here.
3. Every time there is a new Secretary of the Treasury all the money in the Treasury is counted. Try to conjecture how this is done.
4. Trace the history of a mass of bullion from the mine to the banks.
5. What was the subtreasury system?
6. Try to give a good reason for its discontinuance.

CHAPTER X

SAVING AND INVESTING

SAVING

147. The object of saving. The possession of money, or lack of it, plays such an important part in our well-being, in our methods of living, in our comfort or discomfort, that it is of prime importance to accumulate enough of it to live comfortably and to grow old gracefully.

Webster says that money is a medium of exchange and a measure of value, and so it is; but it is much more. What you earn is a part of yourself, because you have been expending yourself in its making. What you save is your concentrated labor, or the stored energy which you lay up in productive years, and which may be released to serve you at your command. It is the part of wisdom, then, to convert a portion of the energy of youth into money saved, so that the infirmities of old age may be provided for. Moreover, saving money gives you a habit of self-control and develops the qualities that produce success. It is only a matter of regulating your habits so that you can systematically save a portion of your income and deposit it regularly in a good interest-paying bank, there to accumulate until you have enough to invest in some good security.

It is of first importance, however, that you do not become so engrossed in the getting of money as to become its slave. Your object should be, rather, to make money serve you; and, should it happen that more of it comes your way than you have use for, it can be used in countless ways to serve others.

148. How money grows. The following is a table showing how money will grow when put out at interest for five years at 4 per cent:

Daily Saving for Five Years	Amount Deposited	Interest Earned	Total Amount
5 cents per day...	$ 91.25	$ 10.66	$ 101.91
10 " " " ...	182.50	21.32	203.82
15 " " " ...	273.75	31.98	305.73
20 " " " ...	365.00	42.64	407.64
25 " " " ...	456.25	53.30	509.55
30 " " " ...	547.50	63.96	611.46
40 " " " ...	730.00	85.28	815.28
50 " " " ...	912.50	106.60	1,019.10
75 " " " ...	1,368.75	159.90	1,528.65
$1.00 " " ...	1,825.00	213.20	2,038.20
1.25 " " ...	2,281.25	266.50	2,547.75
1.50 " " ...	2,737.50	319.80	3,057.30
1.75 " " ...	3,193.75	373.10	3,566.85
2.00 " " ...	3,650.00	426.40	4,076.40

INVESTMENTS

149. Patriotic investors. Throughout the several campaigns for the sale of Liberty Bonds our government, with the coöperation of the banks of the country, did a splendid work, educating its people in the advantages of thrift. Probably more than ten million people bought these bonds, and it is

estimated that more than half of them never before in their lives made an investment of this kind.

Unaccustomed as they were to investments in bonds and stocks, many thousands of them have been a prey to worthless stock-jobbing schemes promoted by unscrupulous persons who held out promises of fabulous profits. The result has been that many who patriotically invested in government securities, the safest investments in the world, have been cheated out of them.

150. Warnings against worthless investments. To combat these conditions many warnings have been issued by the government to beware of "wild-cat" schemes and worthless stocks and bonds offered in exchange for Liberty Bonds. These warnings have been given also by the banks, and reiterated by them; but the work of the unscrupulous promoter goes on, and it is felt that something more constructive than mere warnings is necessary to protect thrifty people in making investments.

151. Education the remedy. It is apparent that the remedy lies in education, and in education alone. When it is realized that a country is rich by reason of what it produces and saves, and, on the contrary, is poor by reason of what is wasted, it becomes a matter of prime importance to teach the men, women, and children of America at least the fundamentals of sound investment. For we know that capital, by which a country is developed, is nothing more than savings persistently added to and

wisely put to work in constructive enterprise, and that the prosperity, and in consequence the happiness, of our people are dependent to a considerable extent upon a knowledge of the fundamentals of finance. It is the purpose of this chapter, therefore, to point out some of these fundamentals.

152. Safe investments. More than half of the wealth of America—now exceeding one hundred and eighty billion dollars—consists of stocks and bonds of its corporations. It is apparent, then, that investments of this nature are legitimate and safe investments for idle money. Many of our corporations issuing stocks and bonds for subscription by the public are honestly and ably managed, and return regularly to the investors substantial dividends and interest, and afford the man who has been diligent in saving, opportunities to invest his money profitably, and in consequence to live with comfort and sometimes in affluence on the returns.

153. When and how to select investments. It requires discrimination and judgment to arrive at an intelligent conclusion as to what to buy and when to buy, for, in the very nature of things, some corporations will succeed and some will fail; some will succeed measurably and some others will succeed extremely well. How, then, are we to discriminate between the good investment and the bad? We cannot tell surely what the result of any investment will be, but we can ascertain facts surrounding it,

and thereby arrive at a basis upon which to form an intelligent opinion.

The first requisite for the success of a corporation lies in the honesty of its managers. The second requisite is the ability of its managers. The third requisite is the excellence of its product and the demand for it from the public.

We know, then, if the management is able and honest, and there is a steady demand for the product of the corporation, that an investment in its securities will probably bring substantial and sure returns. Other elements, however, enter into the degree of success attained, such as convenience of location to market, labor conditions, and, by no means least, the crop conditions; for with good crops people are prosperous and will buy freely; with poor crops they will buy sparingly.

It is evident, therefore, that there is some degree of risk in any enterprise which man undertakes. The logical course to pursue is to use our best judgment, to weigh carefully all conditions and circumstances surrounding an investment, and then to buy or not to buy, as seems best.

154. The safest investment. For those who require a great degree of safety for their money, the safest investment lies either in government bonds or in well-selected municipal or first-mortgage bonds of corporations; or perhaps they may invest their money in land, or in first mortgages on real estate, or deposit it in a strong and well-managed interest-

paying bank, where it will at all times be available. Such investments yield a smaller but more certain rate of income than do others where greater risk of principal is involved.

155. Care in buying stocks. Those who are willing to take a greater chance for the possibility of larger earnings will find that well-selected stocks in substantial corporations will meet their requirements. If, however, a man does not know of the ability and reliability of a corporation's management, and cannot obtain the facts by independent research, it is well to let such investments entirely alone unless he can get the information desired from some business man on whose judgment he is willing to rely; for example, from his banker, who usually has superior facilities for getting information concerning such matters, and will be glad to serve his customer.

156. Kinds of investments. Having laid down some general principles of investment, we shall now take up some definitions and afterward consider in detail some of the different kinds of investments that can be made with safety.

157. Bonds, stocks, and preferred stocks. If a company of men wish to pool their money in order to have a large sum for the sake of beginning a business on a large scale, they form a company and incorporate it under the laws of one of the states. Thus they become a corporation, and their business must be conducted according to law.

Let us suppose they wish to build a railroad. If they have sufficient money to build and equip it, they divide their ownership into shares, or stocks; that is, each member is given as many shares as he desires to purchase. A share may be worth $100, or $500, or $1,000, or any other sum that may be determined upon. The total amount of stock to be sold must be mentioned in the charter. Let us suppose that in this case the company is incorporated for $20,000,000. A man who buys $10,000 worth of stock owns one two-thousandth of the whole, and in all business meetings his voting power is just one two-thousandth of the whole. If the company makes profits, his share is just one two-thousandth of the whole. Thus a stockholder's voting power and his share of the gains of the company depend upon the amount of stock he holds.

Let us suppose, on the other hand, that the company has not enough money to build and equip the railroad. In this case it issues bonds and preferred stocks. *Bonds* are practically mortgages on the property of the road, and the interest on them must be paid out of the road's earnings whether or not there is profit enough to pay dividends on the stock. Bondholders have no voting power, but if the interest on their bonds is not paid they may take the matter into the courts and have a receiver appointed, who conducts the business of the road until such time as it is again on a paying basis.

If the company desires more money than the sale of bonds affords, it may issue *preferred stock*, in which case the original stock becomes *common stock*. Dividends on preferred stock must be paid before dividends on common stock, and they are often *cumulative;* that is, if the company has poor business for two or three years and pays no dividends until, say, the fourth year, all arrears must be paid on preferred stock before anything is paid to holders of common stock.

It is clear, then, that bonds are the safest investment; but, as the rate of interest is fixed, the bondholders do not get a larger return if the company is unusually prosperous. Preferred stock comes second to the bonds in the matter of safety. The common stock is lowest in point of safety; but, on the other hand, it has the possibility of having the greatest value, for if the company is highly successful it can pay interest on its bonds, dividends on its preferred stock, and have enough left to pay the holders of common stock more than either of the other two classes of owners.

158. Fluctuations of stock values. Many causes operate to bring about changes in the value of the stock of corporations—so many, in fact, that a large book might be written on this subject alone. A very few causes will be mentioned here.

In the first place, a company may be very much overbonded; that is, it may have sold so many bonds that nearly all its earnings go to pay the

interest, and there is little or nothing to pay to the holders of the stock. In this case the stock may be bought for a very low price, but is of little value. It is nevertheless bought at times, sometimes by people who believe it will increase in value owing to increase of business, and sometimes by holders of stocks in similar companies, who buy enough stock to gain control of the company and then incorporate it with their own more prosperous business and build it up to a paying basis.

Sometimes it happens that a company that has been paying dividends regularly has a poor year and *passes a dividend*, that is, fails to pay a dividend. Immediately the stock falls in value. If a better year comes and the payment of dividends is resumed, the value of the stock rises at once, or even on the prospect of the payment of a dividend.

A new invention sometimes causes the decline of a company's stock. A rival company owns the invention, gets a much larger proportion of the general business in its particular commodity, and competing companies suffer a decline of business in consequence, their stock falling in value.

A war causes some stocks to rise and some to fall. Thus in our late war many companies that could make war materials did a great deal of profitable business, while the business of companies otherwise engaged in some cases declined.

The building of a new railroad may decrease the cost of getting the product of a company to market,

and thereby increase its earnings and the value of its stock.

A new and sudden demand for a particular commodity may send up the value of its stock at a rapid rate. Our whole experience in the war illustrates this point. Millions of men were called out of industry into the army and navy, and many things were needed to supply them the means of living and of fighting. The increased demand made higher prices possible. Furthermore, there were fewer men in industry to carry on the processes of manufacture, and this had the same effect as a decrease in the supply. The two causes combined to make high prices, which meant higher earnings for many businesses.

159. What not to buy. Sometimes circulars come in the mails making very attractive offers — extravagant ones, indeed. Perhaps some promoters have oil stocks for sale, and they tell you that an investment of a hundred dollars or so will surely make you five, or ten, or twenty thousand dollars. They tell you they can secure for you a lease, or shares in a lease, on lands near which oil is flowing in paying quantities, and that you can make huge profits by joining their company in dealing in leases, or perhaps in actually boring for oil.

It is difficult for a person who has but a small amount to invest to resist the temptation, but the experience of many men who have unhappily been through the experience teaches emphatically that such

investments almost invariably result in total losses. In the first place, the circulars are distributed far and wide over the country and reach people remote from the scene of the proposed venture. Such people can know nothing of the ability and integrity of the promoters; and, if they invest, they not only intrust their money to unknown people, but they put it where they cannot have any personal supervision over it or draw it out if signs of failure loom. In the second place, there are too many tricks in the business of selling stocks of oil wells, gold mines, etc. Even if oil or gold is found in paying quantities, the original promoters of the scheme have so managed affairs that they secure the benefits themselves, leaving to the deceived investors nothing but a lot of useless stock certificates. This sort of thing has happened again and again, and it teaches a valuable lesson: *The get-rich-quick kind of stock is the kind not to buy.* Learn the lesson while you are young.

160. Government bonds. At the time this book was being written a company of brokers was advertising as follows: "The present low price of Liberty Bonds gives the public an unusual opportunity to purchase at attractive yields the safest investment ever offered. If desired, bonds may be purchased on partial payments, 25 per cent with order and balance in six equal payments." At the same time $3\frac{1}{2}$ per cent Liberty Bonds were selling as low as 93.10, which means that on every $100 $3\frac{1}{2}$ per

cent Liberty Bond bought for $93.10 the buyer would get an annual interest of $3.50. At the outbreak of the war millions of people bought these bonds at par, which means that they got, annually, $3.50 for every $100 spent for a bond. The Second Liberty Bond Four Per Cents were selling as low as 85.10, which means that on every $100 Second Liberty Bond bought for $85.10 the buyer would get an annual interest of $4.00.[1] Present prices of government bonds are therefore very low, and not because of any decrease in their value. The government will pay the interest agreed upon, and the bonds are as sound as when issued, in spite of the fall in price.

These facts point plainly to government bonds as the safest investment in the world. Anyone who buys them will do so feeling absolutely secure, and he will be sure, too, that as the years go by they will be worth more, for they will be redeemed at par.

161. Bank stock. In the interest of general soundness in financial matters for the whole nation, our legislatures have been careful to secure the best banking laws possible. This means that banks tend to become more and more secure, and that their business is usually profitable. It follows that anyone who owns bank stock is likely to be fortunate. The founders of a bank pay for their stock at par, and a certain sum must be added for a surplus in

[1] The bonds that pay the lower interest sell higher than the others because they are free from taxation.

order to make the venture doubly secure in its beginning. As time goes on, profits are made, dividends are paid, and certain sums are set aside to be added to the surplus. Thus the stock gradually becomes very valuable. Only a short time ago, a Chicago paper published a list of banks and the prices bid for shares in them. These prices ranged from 110 to 525; and of ninety-four banks listed, forty had stock quoted at 200 or more. It will easily be seen that those people who made the original investments had the good fortune to see their property increase in a very satisfactory manner, and that the soundness of their institutions contributed to the security of business in their city. The purchaser of bank stocks should remember the double-liability requirement that in the case of a weak bank may prove to be a heavy burden if the bank fails. Such failures, however, are becoming more and more rare under government supervision and with a better knowledge of banking.

162. Real estate mortgages and bonds. Many people build their homes on loans. Many farmers borrow money to make improvements on their farms. As security to those who lend the necessary funds, these people give mortgages on their property, and thus a double benefit is brought about, for the borrower gets his house or his improvements sooner than he otherwise would, and the lender gets interest on the money he has saved. Both are secure under all ordinary circumstances—the

borrower because the mortgage may be renewed if necessary at its expiration, and the lender because the mortgage is considerably less than the value of the property.

A mortgage is usually given by one person to another or by a small group of persons to a single person or another small group; but when mortgages are placed on very valuable pieces of property, requiring very large loans, the whole sum is divided into small parts, called bonds, of $50, $100, $500, and $1,000 denominations usually, which are sold to many persons. Thus, a famous firm of bond dealers advertises the sale of bonds to the amount of $875,000 to finance the building of a large apartment house, calling them "First Mortgage 6 per cent Serial Bonds." In order to make it clear that these bonds would be a good investment, the dealers announce that the mortgage is a first mortgage, that it covers the land and the building and includes a first lien on the rentals, that the building is placed on a very prominent residence street, that the borrowers are a very responsible corporation, that the rental income will be more than enough to meet both interest and serial payments of the principal, and that the federal income tax is payable by the borrower. The bonds are payable in terms ranging from two to fifteen years, and are of $500 and $1,000 denominations. There is so much building on a large scale that there are many such opportunities as here described for investing savings; and when

they are offered by a responsible bond house, there is very little likelihood of loss or even of deferred payment of interest or principal.

Bond houses like that mentioned above buy the bonds below par, and sell them for enough to pay their expenses and a profit, at par usually. As such houses do a great deal of advertising and as they employ a large clerical force, the borrowers often must be content with rather a low price for the bonds, and pay a higher rate of interest than the ultimate purchasers of the bonds really get. There are smaller bond houses, however, or money lenders, or real estate men, who go to little or no expense for advertising and for clerical help, who often can place mortgages on small properties, and issue bonds for the construction of moderately expensive buildings, to the better advantage of the borrower than the larger houses. without a lessened advantage to the lender.

163. Municipal bonds. When a city or a town wishes to build water works, gas works, an electric light plant, a street railway, to open or improve a park, or to make any other public improvement, it issues bonds whose security is the whole financial stability of the city or town itself. These bonds are usually sold in denominations suitable to the person of average means, and are likely to sell at par, or even above, unless the city or town has issued too many bonds, in which case the confidence of buyers is shaken and the bonds sell below par.

Such investments, however, are usually good. Many bond houses keep well informed concerning the value of such investments, and take pleasure in giving accurate information to prospective purchasers. It is, of course, very much to their advantage to give accurate information, for if they sold bonds that brought losses to their customers they would find their business dwindling.

164. Industrial stocks. The stocks of companies engaged in manufacturing, or even in buying and selling, are called *industrials*. While they offer opportunities for great gains, they also are likely to bring losses upon their owners. They are therefore often speculative; that is, buyers who like to take risks in the hope of making great gains try to buy them when they are low in price and sell them when they are high, thus making a profit in addition to dividends. This is distinctly "a game," and a dangerous one, for there are very few people in the world who have a sufficient knowledge of business conditions to be able to prophesy the rise or fall of a particular stock, and many men have been ruined by attempting to do so. There are many natural causes for fluctuations in the value of industrials, and one very artificial one — the manipulations of the speculators. These persons are either "Bulls" or "Bears." The latter try to pull down the value of the stock of a corporation by selling much of it on the stock exchange so that they can buy again more than they sold, and at a much lower

price; while the former try to raise the value of the stock by buying much of it in order thereby to raise the price and then sell all they have, and at a much higher price. For example, the stock of a certain motor car company sold, at one period during the war, as low as 40, then climbed to about 140, fell again to between 80 and 90, and in 1920 was selling at about 113. There were no fluctuations in the business of the company that could have accounted for such variations; they must have been the work of the Bulls and the Bears. There are many industrial stocks that are safe to buy at almost any time; but for the uninformed person to enter the game of speculation in stocks is simple folly. It is better in every way to be content with security and a moderate interest or dividend. The inexperienced investor should always consult his banker, who usually has superior facilities for ascertaining values, if he happens not to be already acquainted with the stock or bond in which he is thinking of investing. An important part of a bank official's duty is to study and, so far as possible, to know values.

165. Life insurance. The great life insurance companies of America are among the strongest and most ably managed financial institutions of the world. Some of them have demonstrated their soundness through many years of experience, and have accumulated resources amounting to hundreds of millions of dollars. Many of our most prudent and successful business men regard the purchase

of life insurance as the safest and surest way of creating an estate, and their judgment has been confirmed and emphasized in the perilous times through which we have recently passed and in which so many of man's enterprises have met with serious loss and disaster. That their example in the purchase of life insurance has been followed by millions of others argues well for the thrift and good common sense of the American people.

Life insurance is a positive process of *saving*, valuable not only as a means of creating an estate, but more valuable as a builder of *character*, teaching, as it does, systematic self-denial and personal self-sacrifice. Such an estate grows surely, every year, and is easily acquired in installments by the persevering. Furthermore, it constitutes an immediate estate in the event of death, and is the surest way of providing for the infirmities of old age when the producing years of youth have come to an end. It does not hold out the promise of large profits or the assurance that one may live in luxury, but it does pledge a reasonable competence for the wife and children when the breadwinner has departed; *then it pays what he had hoped to save.*

It is well to begin the purchase of life insurance early in life, because the rates for such protection increase as age advances, and one may not avail himself of the standard rates of any company at any age unless his physical condition is sound. A variation from standard health will cause the company

to charge an additional premium; or it may preclude the possibility of obtaining such protection in any form, except in an annuity (or income bond), coupled with the payment of a high single premium.

In addition to this, many persons who are prosperous during the early periods of life meet with misfortune in old age and end their days in poverty. Many others inherit wealth, but lose it through ill-advised investments or rash speculation. Women untrained in business are left large sums by deceased parents or husbands, only to part with all in the course of a few years through following bad advice or through lack of business judgment. Such an exigency may be provided against by the purchase of annuities for wife and daughter, such as are supplied by the great life insurance companies. These annuities may be purchased in installments, and at standard rates, while the applicant is in good health; and they mature for their face value immediately, and without further payments, at the death of the insured.

It is very desirable that the value of life insurance should be recognized, and the time will probably come when every prudent man will go to the life insurance companies, as a matter of course, to provide for the future of his family as he goes now to the butcher or to the grocer to provide for their present needs.

In the conservation of estates life insurance is most valuable. It is exempt from the United States

inheritance tax to the extent of $40,000 if made payable to a beneficiary. During the life of the insured he is relieved by his insurance of the necessity of keeping a large amount of cash on hand. Upon his death an amount of money large enough to meet all present needs is at once at hand, thus preserving the estate and guarding against loss.

Wealthy men of England have for many years been buying large amounts of life insurance in order to meet the heavy British tax on inheritances. The federal and state inheritance taxes have led many prominent Americans to take similar action. For example, J. Pierpont Morgan, head of the great Morgan banking house, recently applied for insurance in the amount of $2,500,000.

It would seem the part of prudence for everyone to invest at least a portion of his income in life insurance best suited to his needs. However, it is necessary to use care in the selection of the company. Some insurance organizations are in an impregnable position; others are not so strong; and as the contract is likely to be one extending through many years, care should be taken to ascertain the strength of the company in which one contemplates investing his savings.

165. Safety deposit vaults. The *safety deposit box* is the lineal descendant of the deed box, and is an adjunct of business, property, and banking. As soon as mankind had ceased to roam here and there over the country, hunting and tending flocks, and

had settled upon the land, each family to own a particular share, there arose the necessity of having some proof of ownership. Eventually proof of ownership became some sort of legal document, such as a deed, which was kept by the owner, while his ownership was further recorded in the archives of the local government. Owners of land found it necessary to preserve their documents with care, and hid them in places they considered secure. Later a special box was devised, called a deed box, in which important papers were kept; but still there was no secure place to deposit such receptacles until the banks began to afford space for the purpose. Still later the safety deposit vault was instituted, and is now a recognized necessity.

Let us take a brief journey through one of these. It is in the basement of a large building in a large city. You descend the steps or go down in the elevator, and approach a heavy door of steel bars. A police officer swings the door open for you, and you enter, to find yourself in a long room in which sit the manager and his assistants. At the opposite end of the room is another door of steel bars under guard of another police officer. He swings the door open. You pass through into a hallway running right and left. Before you is a room with a door of solid steel, having ponderous bolts and a time lock. You enter, and find the walls, from floor to ceiling, composed of small rectangles of metal, each with a number on it. Each little rectangle

is the door of a compartment in which is a steel box containing the papers of some person or family. You take out your key and hand it to the attendant. He glances at the number stamped on the metal surface, goes to the compartment having the same number, opens it with your key and one of his own, draws out a long, slim, steel box, and hands it to you. This box is also locked, and the key accompanies it. You walk out the door, turn to your left, and go down the hall to one of a number of rooms in each of which there is a table and a chair or two. The door is closed behind you by an attendant. Here you open the box in private, and put in any new papers which you wish to keep in security, or perhaps take out those for which you have immediate need. Here you keep your deeds, your stocks and bonds, your insurance papers, your notes, your mortgages, your War Stamps, and whatever other documents or articles of value you may have. When you have finished, you lock the box, put the key on top, and return to the room where you got it, and watch the attendant while he replaces it. You receive your key, and go away, knowing that, when you return, your papers will have been absolutely undisturbed.

BUDGETS

167. The budget plan for the government. For many years the politicians and business men of the country have discussed the desirability of having

the Congress of the United States adopt a budget system in order to bring about a more economical expenditure of public funds. A *budget* is merely a systematized plan of spending, with a view to the prevention of extravagance and waste. Such a plan has now been adopted by Congress, and is to be carried out under the management of Mr. Charles G. Dawes, a Chicago banker. When it is completed, we may expect that there will be no longer any unnecessary expenditures in our federal government, but that a rigid economy will be maintained.

168. The budget plan for the individual. If it is desirable for a government to have a budget system, is it not also desirable for an individual or a family to have one? If a young man (or woman), just beginning to make his own money, determines that he will spend no more than a certain sum for board and lodging, no more than a certain sum for clothing, no more than a certain sum for amusements, etc., and that he will save at least a certain sum, he has already laid a foundation for thrift and for a comfortable old age. The difficulty is that young people seldom realize that they will ever be old. Old age is so far away that they think they will not worry about it until they reach it. When they do reach it, they regret that they did not have forethought when they were young.

A great deal is being done in these times to encourage thrift among the young as well as among the old. Certain banks, for example, publish "Budget

Books" to present to their depositors. These books have pages ruled for the keeping of accounts, and contain lists of about everything for which anyone would need to spend money, such as rent, light, fuel, laundry, insurance, taxes, groceries, clothing, books, magazines, travel, contributions to church and charity, health, theater, etc., and especially *savings and investments*. There are also pages giving instructions for the scientific making of a budget. The young person can do nothing better than to adopt some such plan, put his savings in a savings bank, and, when he has a sum sufficiently large, make a judicious investment.

TEACHING THRIFT IN THE SCHOOLS

169. A successful thrift project. Before the beginning of the war one of the Chicago banks introduced a savings plan in a number of the public schools, but our entrance into the great conflict brought the government plan of selling Thrift and War Savings Stamps, and the bank plan, which had been admirably conceived, died a natural death. In some of the Chicago schools the government plan of saving still continues. In one school it works out as follows: Thursday is Thrift Stamp Day, and at a given hour a messenger from each room enters the principal's office. Each messenger bears in his hand a sum of money and an order-and-receipt blank properly filled, which indicates the number of Thrift Stamps to be bought for his

room, the number of "filled books," with a statement of the extra amount requisite to make an exchange for War Savings Stamps, and the number of War Savings Stamps to be bought for cash. The principal counts the money, checks the total on the blank, checks the number of "filled books," verifies the multiplications and additions, attaches his signature, and sends the children back to their rooms with the blanks. When all records have been made, he foots up the columns, balances them, and counts the money. If the cash and the figures on his record sheet do not balance, he must find the error. Then he makes out his order and goes to the sub-postal station a mile or more away, where his money is counted by the man on the other side of the wicket, and his purchase made. He then returns to the school and sends a messenger to the rooms with word that stamps may be called for. Again the children bring their order blanks, the stamps are counted out to them, the blank is checked, and the messengers depart to their rooms, where the purchasers receive what they have bought.

This is the weekly lesson in thrift. While the war lasted, the school, numbering about a thousand pupils, bought as high as five hundred dollars worth of the government stamps in one week, and frequently more than two hundred dollars worth. In some schools the amounts ran much higher. Now that we are no longer under the spur of winning the fight, the amounts have fallen off very much,

but a precedent was established from which much may be hoped in the way of guiding us wasteful Americans into ways of thrift.

170. Means of encouraging thrift. There has been no greater evidence of the nation's confidence in the public schools than the burden thrown upon them during the war. They were asked to do things, and they did them, under the constant encouragement of the government and of various societies. The Treasury Department sent *Little Lessons in Thrift* and *The Savings Letter; School Life* came from the Bureau of Education; the Committee on Public Information sent "The Junior Four Minute Men Liberty Loan Contest" publications; the Food Commission saw to it that its aims and purposes were known. Besides, the *War Savings Bulletin* came from our state committee, reports and business letters from the Red Cross office, pamphlets by the hundred from the Union League Club, documents from various societies regarding war matters, certificates giving credit for work done by the schools, and posters and bulletins without number—all encouraging thrift and social service, both of which are good business ethics. This went on all over the country, and if there were available a complete report of all the schools did during and after the war, not only in buying government stamps and bonds and inducing other people to buy them, but also in performing various sorts of social service, it would

be plainly seen that the schools did not fail in performing the task assigned them.

Schools were formerly very much isolated. Each one did the work assigned to it, and contented itself with that. But of late years the impression has been growing that life in school and life out of school should be closely related—that the problems of the school boys and girls should be as much like those of their fathers and mothers as possible. Out of this idea has grown the fact just discussed—the placing of a part of the war burden upon the schools. One phase of this burden was thrift, and its value lay not only in helping to provide money for the government, but also in teaching wise saving and wise spending, for that is thrift. Many helpful documents came to school principals. One was *Thrift in Schools, An Outline of a Course of Study for Elementary Schools*, prepared by the Savings Division, War Loan Organization, U. S. Treasury Department, and may yet be available. Another was *Thrift Projects*, also issued by the Treasury Department. It appears in full in the Appendix, pages 198ff. The banks in a community can assist in making good useful citizens as well as can the schools. There ought to be co-operation between them. The bank's work is concrete and practical. Each school ought to have talks about the functions of the banks in its city by the local bankers from each bank.

Questions for Discussion

1. How does money play a part in human happiness?

2. In what sense is the money we make and save a part of ourselves?

3. Describe the life of a person who saves and accumulates money rationally, thus making it his servant, and contrast him with one who becomes a slave to money. What kind of lives would the two lead?

4. In what way did people who could not go to war show their patriotism? In what way did they afterward show poor judgment?

5. What agencies gave warning? Why?

6. What remedy is there against future errors?

7. What means is there of telling whether the bonds and stocks of a particular industry may prove a good investment?

8. Who is a good adviser in such matters?

9. Define bonds, stocks, and preferred stocks.

10. What reasons can you give for the fluctuations in the value of stocks? Read the financial pages of a newspaper and find out other causes. They will make excellent material for class discussion.

11. What are the objections to the get-rich-quick stocks?

12. Why are government bonds the soundest investment? Why do they often sell high in spite of their low interest?

13. For what reason is bank stock very desirable?

14. What of real estate mortgages and bonds? How is the sale of these securities managed?

15. What are municipal bonds? Are they usually good investments? Why?

16. What stocks are most subject to stock gambling? Why?

17. It would be a good class exercise to devise a budget for home use, or even for yourselves for the proper use of your allowances, no matter how small. Talk it over; outline some forms on the blackboard.

THE APPENDIX

THE APPENDIX

Herewith is reproduced the course of study called *Thrift Projects* mentioned in section **170.** It will be of interest (*a*) to any person who is interested in the increase of thrift in our country, (*b*) to fathers and mothers, who desire to teach their children to save as well as to spend, (*c*) to teachers, who are coming more and more to believe that their work is largely social, and (*d*) to high-school pupils.

In studying it, high-school pupils are to bear in mind that it was prepared for pupils younger than themselves, and that it will not be necessary for them to do all the things mentioned. They can, however, with profit to themselves, read it, and discuss the following questions:

1. What famous people have expressed themselves on the subject of thrift? What have they said?

2. What events in American history have had thrift-value on a national scale?

3. What opportunities does every American home offer for the practice of thrift?

4. Has the invention of machinery promoted thrift?

5. Have you personal knowledge of thrift practiced in any manufacturing industry by the saving of by-products?

6. In what ways can boys and girls in school practice thrift for the benefit of taxpayers?

7. How are health-preserving habits productive of thrift?

8. Has thrift any special merit or value in a democracy?

9. Does thrift mean the mere saving of money?

THRIFT PROJECTS

INTRODUCTION

One of the most important problems which present themselves at this time to the American people is the necessity for individual and national thrift. Thrift is a virtue which can be acquired only after careful study and practice. The schools are in a position to render distinguished service to the nation by establishing the habit of thrift firmly in the minds of those who are soon to direct its affairs.

The outline for the teaching of thrift here presented is designed to place in relief those portions of the various subjects in the curriculum which constitute the material best adapted to the teaching of thrift. It is intended primarily to be used in connection with the subjects now in the curriculum, but may, if desired, form a suggestive basis for special instruction in thrift.

Its further purpose is to serve as a means of motivating the various subjects in the curriculum by interpreting them more clearly in terms of the practical demands of modern life, among which thrift assumes a prominent place.

This outline is flexible enough to be adapted to the school systems of all localities. With wise administration, it should contribute in a large way towards making the future men and women of America a permanently thrifty people.

DEFINITIONS

Thrift is care and prudence in the management of one's affairs.

"Thrift means the sane administration of one's personal affairs to the end that there shall be the least amount of waste, the least amount of lost motion, and the greatest good to one's self and the nation."—STRAUSS.

"Economy is near to the keystone of character and success. A boy that is taught to save his money will rarely be a bad man or a failure; the man who saves will rise in his trade or profession steadily; this is inevitable."—GLADSTONE.

Thrift means to get the most for one's money, the most for one's time, the most for one's strength.

"Extravagance rots character; train youth away from it. On the other hand, the habit of saving money, while it stiffens the will, also brightens the energies. If you would be sure that you are beginning right, begin to save."—ROOSEVELT.

AIMS

1. To give the child a broad understanding of the specific facts and underlying principles of thrift.

2. To train the child in habits of conservation and the wise use of all his resources.

3. To create through the schools a public sentiment in favor of thrift and economy, and, through this public sentiment, to cultivate the national habit of thrift.

METHODS

1. Direct presentation of the ideals, purposes, and principles of thrift through morning talks, discussions, special exercises, and school Savings Societies.

2. Correlation of subject matter on thrift with the established curriculum of the schools.

3. Habit formation through the practice of saving time, materials, and money; investment in Thrift Stamps and War Savings Stamps; deposit of money in local savings institutions.

TEN PRINCIPLES OF THRIFT

To Be Emphasized in the Various Subjects of the Curriculum

1. "Conservation, in geography."
2. "Opportunity, in biography."
3. "Coöperation, in history and civics."
4. "Industry and ideals of thrift, in literature."
5. "Earnings, savings, and investment, in arithmetic."
6. "Hygiene and sanitation, in physiology."
7. "Economy in construction and use of materials, in shop work."
8. "Economy and right use of foods, in cooking."
9. "Economy of making and repairing, in sewing."
10. "Enthusiasm, concentration, and singleness of purpose, in all subjects."

FIVE PRINCIPLES OF PERSONAL THRIFT

1. Learning how to keep healthy.
2. Learning how to work efficiently.
3. Learning how to save time, energy, money, and materials.

4. Learning how to spend wisely.
5. Learning how to invest money intelligently.

OUTLINE BY GRADES

Grades I and II

I. *Direct Instruction:*

Morning talks on the importance of small savings in school and at home—paper, pencils, light, food, and money; care of books, shoes, and clothing.

II. *Correlated Study:*

1. Numbers: counting and adding money saved. Teach objectively with cents, nickels, and dimes combinations of numbers to 25. A means of explaining the cost of a Thrift Stamp.

EXAMPLE

How many cents does it take to buy a Thrift Stamp?
15c+10c=25c.

2. Reading: Mother Goose rhymes, nature poems, and familiar stories which teach lessons in thrift.
3. Oral Language Studies:
   a) Nature study: indoor gardening, observation of seeds in process of germination; transplanting of seedlings; protection of neighborhood plants and flowers; conservation of wild flowers and shrubbery.
   b) Hygiene: emphasis on sleep, fresh air, cleanliness, plain food, care of teeth, and the prevention of colds and sickness.
   c) History and geography: economy of primitive life as illustrated by pastoral peoples; large territory necessary to support tribes who move from place to place. American Indian: hunting and fishing as chief occupations; agriculture in primitive stage; little provision for future; indolence among the men.

III. *Practice:*

Saving pennies, nickels, and dimes. Use of plan to record pupils' savings of less than 25c. Purchase of Thrift Stamps; saving paper and pencils.

Grade III

I. *Direct Instruction:*

Salvaging of clothing and paper for charitable purposes.
Saving of time by orderly methods at home and in school.
Morning inspection for cleanliness; care of hair, teeth, hands, and nails.

II. *Correlated Study:*

1. Numbers: simple addition, subtraction, and multiplication in problems relating to Thrift and War Savings Stamps.

EXAMPLES

How many stamps are needed to fill one-half of a thrift card?
When a thrift card is full, how much is it worth?
When a thrift card is full, how much must be added to buy a War Savings Stamp in May?

2. Hygiene: study of health rules. Attention to eyes, ears, nose, and teeth, with definite reasons for their proper care. Correct posture for standing and sitting.
3. History and geography: Robinson Crusoe: salvaging useful things from the shipwreck; industry in providing necessities; simplicity of his life. American Colonial thrift: industry in clearing forests and building houses; spinning, knitting, weaving, and other practical arts learned in the home. Thrift of the early settlers in various sections of the country; conquest of forests and prairies.
4. Nature study: industry and providence of squirrels, chipmunks, and ants. Economy of seeds, fruits, and plants in storage of food for future use. Man's food made by action of sun's rays on the leaves of plants. Roots extract nourishment for the plant from the soil.
5. English: oral and written compositions on saving materials and money. Topics: "How pennies grow to quarters"; "How I save at home." Thrift stories and poems: *Æsop's Fables* and *Robinson Crusoe.*

III. *Practice:*

Saving small sums of money. Use of plan to record pupils' savings of less than 25c. Purchase of Thrift Stamps. Saving of books and protection of school furniture.

Grade IV

I. *Direct Instruction:*

Morning talks: a principle of thrift—learning how to keep healthy. Good and poor ways of spending money. Earning, saving, and sharing in home projects. Difference between thrift and stinginess.

II. *Correlated Study:*

1. Arithmetic: fundamental processes in problems relating to earning, spending, and investing. Special problems involving the purchase of Thrift Stamps and War Savings Stamps.

EXAMPLES

There are 26 girls in the fourth grade. Each girl bought 16 Thrift Stamps. How much did all the girls save?

By selling papers, Jack earned enough money to buy 2 War Savings Stamps and 12 Thrift Stamps. How much money did he loan to the government if he paid $4.14 for each War Savings Stamp?

2. History: illustrations of economy in the home life of the Greeks and Romans. "Everything in moderation" as a Greek ideal. Physical efficiency of the early Greeks and Romans. Frugality of the early Romans. Luxury and extravagance as a cause of the decline of Rome. France: remarkable recovery of the French nation through thrift after the Franco-Prussian War. United States and the Allies: conservation of labor and material as a means of winning the Great War.
3. Geography: study of local industries, occupations, and agricultural products; home markets, gardening, boys' and girls' club work, and excursions to local manufacturing plants. Relation of the foregoing to the means of making a living and providing for future needs.
4. Hygiene: home and school hygiene; correct methods of ventilating and regulating the temperature of sleeping rooms and schoolrooms; daily physical exercise; value of manual work. Obedience to and daily practice of common health rules. Health as potential wealth. Health saves expense of sickness. Health inspection in the schools.
5. Nature study: birds and bees as agents of Nature's thrift. Destruction of harmful insects by birds. Industry and

providence of bees in storing honey for winter. Ways in which plants and animals protect themselves and their young.

6. English: reading of *Stories of Thrift for Young Americans*, Scribner, New York; *How We Are Clothed*, Macmillan, New York; *How We Are Fed*, Macmillan, New York; *Safety First for Little Folks*, Scribner, New York; Red Cross stories of child thrift in other lands. Dramatization of short thrift plays and the writing of compositions on thrift subjects. Ways of practicing thrift—odd ways—usual ways.
7. Special: Savings Society programs at specified intervals.

III. *Practice:*

1. Care of clothing; repair of clothing. Care of shoes. Neatness in dress. Care of books; repair of books. Keeping desks clean and in order.
2. Direct the collecting instinct, which awakens at the age of ten, along usual channels of saving.
3. Salvage of paper, rubber, copper, tinfoil, iron, and bottles.
4. Encourage definite earnings: doing errands and household tasks; selling produce.
5. Buy Thrift Stamps and War Savings Stamps.

Grade V

I. *Direct Instruction:*

Discussion topics: a principle of thrift—learning how to work efficiently. Meaning of economy. Wise use of time and recreation; work and sleep in right proportions. Formation of correct habits; good habits of study. What children have done that shows the value of thrift.

II. *Correlated Study:*

1. Arithmetic: keeping personal accounts of earnings and savings.

Examples

ACCOUNT OF WEEK ENDING MAY 10, 1919

1919 May	Expenses		1919 May	Receipts	
5	Car-fare	$0.10			
6	Pencils	.08			
8	Candy	.10	4	On hand	$0.22
9	Red Cross	.25	5	Allowance	.25
10	Thrift Stamps	.50	8	Waste paper	.40
10	Balance on hand	.34	10	Delivering packages	.50
		$1.37			$1.37

2. History: illustrations of thrift and public service in promoting the economic welfare of the country, selected from the biographies of Franklin—widespread public instruction in thrift; Jefferson—foresight in purchase of Louisiana; Lincoln—wise use of time and opportunity; Roosevelt—conservation of natural resources; Hoover—food saving.
3. Geography: study of industries of different sections of the country. Increased production of food and manufactured articles through improved machinery. Quantity production reduces cost. Utilization of by-products reduces waste. By-products of cotton, corn, wheat, petroleum, coal, and the packing industry.
4. Hygiene: health habits necessary to personal efficiency. Impairment of health and waste of money through useless luxuries. Methods of preventing communicable diseases: vaccination, quarantine. Keeping the community in sanitary condition.
5. English: reading of *Poor Boys Who Became Famous*, Crowell Co., New York; *The True Story of Benjamin Franklin*, Lothrop, Lee & Shepard Co., Boston; *The Child's Food Garden*, World Book Co., Yonkers, New York. Compositions on the importance of good health; saving of time and effort through correct habits; value of system and order in work; how to keep healthy; money value of health.

III. *Practice:*

1. Sewing; mending; knitting of wristlets, caps, and scarfs. Crocheting squares for covers from odds and ends of worsted.
2. Woodworking and repairing; elementary book repairing and binding.
3. Home and school gardens; boys' and girls' club work; home projects and chores.
4. Buy Thrift Stamps and War Savings Stamps.
5. Salvage of waste materials in home and community.

Grade VI

I. *Direct Instruction:*

Discussion topics: a principle of thrift—learning how to save time, energy, money, and material. Meaning of

providence. Vocational guidance; opportunities in various gainful occupations. What is required to be successful in each of the fundamental occupations.

II. *Correlated Study:*

1. Arithmetic: personal accounts; business accounts; personal budgets.

EXAMPLE

PERSONAL BUDGET

I expect to have		I expect to save		I expect to spend	
				Car-fare	$0.10
				Pencils	.08
				Candy	.10
Allowance	$0.25			Red Cross	.25
Earnings	.90	Thrift Stamps	$0.50	Church	.12
	$1.15		$0.50		$0.65

2. History: contributions of inventors to national thrift. Whitney: "One man with a cotton gin can clean a thousand pounds of cotton in place of five pounds formerly cleaned by hand."
   Fulton: Steamboat reduces the cost of transportation, and marks the beginning of great expansion of internal and foreign commerce.
   McCormick: "Reaper enabled one man with a team of horses to cut as much grain as twenty men swinging cradles."
   Howe: "Sewing machines resulted in saving in wages which reduced the cost of the factory product to one-fourth that of the hand-stitched garment."
3. Geography: reclamation of arid lands by irrigation and dry-farming; reclamation of swamp lands through drainage; reclamation of abandoned farms through improved methods of agriculture. Use of vacant lots for gardens. Observance of Arbor Day.
4. Hygiene: community health and sanitation—pure water, clean streets, and sewers necessary to community thrift. Prevention of disease carried by flies and mosquitoes. Health inspection in the schools.
5. English: reading of *Captains of Industry*, Houghton Mifflin Co., New York; *Swiss Family Robinson*, Jacobs & Co., Philadelphia. Suggestions for theme topics: How leading local merchants, doctors, lawyers, bankers, and teachers make striking successes of their work;

How to do one's share at home, at school, in church, and in Sunday school.

6. Special: meetings of Savings Societies. Attention to the value of coöperation and group action in earning and saving.

III. *Practice:*

1. Cooking—plain dishes; wholesome food. Sewing on the machine; repair of clothing; repair of shoes.
2. Woodworking—making useful articles; using waste materials. Repairing chairs and other furniture about the home. Making boxes and shelves.
3. Garden work—planning and care of home and school gardens; use of products of gardens; canning of fruits and vegetables; canning clubs. Strict account of expenses and profits.
4. Buy Thrift Stamps and War Savings Stamps.
5. Christmas savings clubs of local banks. Starting building and loan accounts, postal savings accounts, and savings-bank accounts. Contributions to worthy causes.

Grade VII

I. *Direct Instruction:*

Discussion topics: a principle of thrift—learning how to spend wisely. Meaning of frugality. Wise spending. Habit as a great time- and labor-saving device. Education as a means of increasing income and of multiplying opportunity. Doing one's share of the world's work.

II. *Correlated Study:*

1. Arithmetic: application of simple interest and commercial discount. Problems in percentage and interest with special reference to savings-bank deposits and War Savings Stamps.

EXAMPLE

A merchant bought a bill of goods for $828.00. A discount of 5 per cent was given for cash payment. He invested the money saved in War Savings Stamps at $4.14 apiece. How many did he buy?

2. Civics: thrift in community government. Individual responsibility for the wise expenditure of public funds. Coöperating with the local government in preventing

waste and protecting city property. Laws relating to health, sanitation, and garbage disposal.

3. Geography: conservation of forests, mines, and water-power; soil erosion. Improved methods of production, manufacturing, and selling.
4. English: reading of *Autobiography of Benjamin Franklin*, Henry Holt & Co., New York; *Wealth of the World's Waste Places and Oceania*, Scribner, New York; *Modern Americans*, Laurel Book Co., Boston. Collecting and reporting important facts on savings and thrift. Short compositions on saving of time, materials, and money.

III. *Practice:*

City Schools

1. Coöperation to secure vacation and after-school work.
2. Market gardening. Club work. Boys' Working Reserve.
3. Cooking—nourishment value of different foods; different kinds and grades of meat and other foods. Saving the waste. Learning how to buy economically.
4. Sewing, with emphasis on the economy of materials.
5. Buy Thrift Stamps and War Savings Stamps; keeping accounts with local savings institutions.

Rural Schools

1. Individual farm enterprises for boys; care of poultry, bees, and field crops. Profit-sharing with fathers.
2. Care of poultry, vegetables, and flowers for girls. Profit-sharing with mothers.
3. Accurate account of expenses and receipts. Children's individual budgets. Family budgets.
4. Buy Thrift Stamps and War Savings Stamps. Deposit savings in post office, savings bank, or building and loan association. Keep personal bank account subject to check. Contributions to worthy enterprises.

Grade VIII

I. *Direct Instruction:*

Discussion topics: a principle of thrift—learning how to invest money intelligently. Meaning of parsimony. American extravagance; nation's bill for luxuries; comparison with European countries. Principle of goods and services. Advantages of cash buying. Salvaging useful articles. Fire prevention.

"Buying on the Installment Plan," "The Man without a Savings Account," "The History of Savings in Other Countries," "Best Purposes for Which to Give Money," "Best Purposes for Which to Save Money."

5. Special: local speakers to explain the practical side of thrift in business and professional life. Specific illustrations of the different kinds of thrift.

III. *Practice:*

City Schools

1. Earning money after school hours and during vacation periods. Regularity of saving in definite amounts. Savings for a definite purpose.
2. Purchase of Thrift Stamps and War Savings Stamps. Keeping a savings bank account. Personal budgets for time and money. Bank account with pass book and check book. Contributions to worthy enterprises.
3. Shop work for boys; practice of housekeeping arts for girls. Home chores.

Rural Schools

1. Larger farm projects for boys; corn clubs; potato clubs; marketing of produce. Budget making for the farm. Farm planning.
2. Wider domestic activities for girls; canning clubs; skill and taste in purchasing materials and in dressmaking. Keeping household budgets.

FACTS AND TABLES

Table showing accumulation of deposits of 1c to $5.00 weekly, and interest at 4 per cent per annum, compounded semiannually.

Weekly Deposits	1 Year	2 Years	3 Years	4 Years	5 Years
.01	.53	1.08	1.66	2.25	2.88
.10	5.30	10.82	16.56	22.54	28.75
.25	13.26	27.06	41.41	56.34	71.88
.50	26.52	54.12	82.82	112.69	143.76
1.00	53.05	108.24	165.65	225.38	287.53
2.00	106.09	216.46	331.30	450.78	575.09
3.00	159.13	324.69	496.94	676.15	862.50
4.00	212.18	432.93	662.50	901.55	1,150.15
5.00	265.23	541.17	827.26	1,123.89	1,432.50

BUYING W. S. S. SYSTEMATICALLY*

1919

Stamps		Average Cost	Maturity Value
1 W. S. S. a month, or	$ .96 a week	$ 50.16	$ 60.00
2 W. S. S. a month, or	1.93 a week	100.32	120.00
3 W. S. S. a month, or	2.89 a week	150.48	180.00
1 W. S. S. a week, or	4.18 a week	217.36	260.00
2 W. S. S. a week, or	8.36 a week	434.72	520.00
3 W. S. S. a week, or	12.54 a week	652.08	780.00
4 W. S. S. a week, or	16.72 a week	836.00	1,000.00

*For 50 weeks.

W. S. S. cost $4.12 (January) to $4.23 (December). The approximate average cost is $4.18, which figure was used in compiling the above table.

WHAT A SAVING OF $1 A WEEK AMOUNTS TO

(4 Per Cent Interest Compounded Quarterly)

1 Year	$ 53.05	15 Years	$1,066.99
3 Years	165.69	20 "	1,589.60
5 "	287.67	25 "	2,227.28
10 "	638.68	30 "	3,005.38

The Woolworth Building in New York was built with five and ten cent pieces.

Italians own more than $200,000,000 worth of real estate in New York. Most of this was acquired through the practice of thrift.

The National Association of Waste Material Dealers states that previous to the war Americans threw away $700,000,000 each year, other than food.

If a single ounce of edible food is allowed to be spoiled or thrown away in each of our 20,000,000 homes, over 1,300,000 pounds of material would be wasted each day.

There are 1,250,000 dependent wage-earners in the United States because they could not or would not save during their working days. The support of these costs $220,000,000 a year.

In one year 27,011 adults died in New York County. Of these 23,051, or 83.3 per cent, left no estate.

If your ancestors and mine had not saved, we should still be crossing the continent in a prairie schooner. Railroads were impossible without savings.

Altogether during 1918 we saved over 25,000,000 tons of coal, two weeks' total average production of all the bituminous coal mines in the United States. Part of this saving was a result of going without some things we were accustomed to, but the larger portion was saved by more intelligent utilization of the fuel without any accompanying loss of product or comfort.

Setting the clock ahead one hour last summer resulted in a fuel economy of 1,250,000 tons. Turning off of some of our electric signs and the observance of lightless nights saved 250,000 tons of coal. Because we walked a half block further in order to catch a car we helped the street railways save a large part of their 700,000-ton contribution to fuel economy in 1918.

Only one American home in four has plumbing facilities. Are running water, a shower bath, and kitchen conveniences worth saving for?

The total of the small and steady savings of the Swiss is so great that their savings institutions have to go to foreign countries to find investments for a large share of their deposits.

Few men ever get rich on a salary alone. Persons with an income of between $3,000 and $4,000 annually receive on an average slightly less than half of it as wages, salary, or professional fees. Over half of their income comes from interest, profits, and dividends. Get some invested savings working for you.

Most states prohibit banks from paying interest on dormant savings accounts after a certain period, usually about twenty years. This is the reason: If a certain person deposited a few dollars in a bank at compound interest and left the money there indefinitely, this small account would in time absorb all the money in the world. Such is the power of compound interest.

In 1858 some one deposited $100 in a bank in Lowell, Massachusetts, and about a year later another $100. No other deposits were ever made. In 1898 the account had increased through interest to $1,400.

Every dollar you invest at 4 per cent, compounded quarterly, will double itself in less than seventeen years. War Savings Stamps pay this rate of interest.

THE INDEX

Adams, John, quoted, 130
Administrator, trust companies as, 80
American Bankers Association, and Travelers' Checks, 53
Amsterdam:
  development of banking in, 59 f.
  early banking in, 119
  early trade in, 59
Annuities, 186
Arithmetic, banking, 85–105
Arizona, state banking laws in, 70
Athens, early trade in, 59
Attest, definition of, 67
Averages, law of, as applied to banks, 81 f.

Babylon:
  earliest known bank in, 58
  trade in, 59
Bank (*see also* Banks):
  and the business world, the, 1 ff.
  and its customers, 16–57
  benefits of a, 1 ff.
  debts of a, 113
  functions of a, 1
  of issue, defined, 58
  property of a, 110
  selection of a, 9
  strength of a, 62, 110
Bank account:
  how to open a, 16 ff.
  overdrawing, a poor policy, 22 f., 41
  value of, to the individual, 7 f.
Bank deposits. *See* Deposits
Bank discount. *See* Discount
Banker:
  duty of, to the public, 11, 14 f.
  patriotism of, during the World War, 14
Bankers Trust Company, and Travelers' Checks, 53
Bank examiner:
  duties of, 115 ff.
  of national banks, 68
  of state banks, 70
Banking (*see also* Bank; Banks):
  development of, 59 f.
  expansion of, under modern conditions, 60 f.
  specialization of functions of, 60 f.
Banking arithmetic, 85–105
Banking business, the, 61 ff.
Bank money, 60
Bank notes:
  issued by Bank of England, 120
  issued by Bank of France, 125
  issued by Federal Reserve Banks, 146
  issued by First Bank of the United States, 134
  issued by national banks, 69
  reserve required for, 69, 138
  issued by Second Bank of the United States, 135
  issued by state banks, 134, 136, 137
  kinds issued in the United States, 150
  necessity for, in the United States, 125
  printing of, 161 f.
Banks (*see also* Bank; Banking):
  and banking, 58–84
  and depositors, obligations of, 9 ff.
  as a bookkeeper, 8
  chief business of, 65
  classification of, 67 ff.
  coöperative. *See* Building and loan associations
  credit information supplied by, 2 f.
  development of, 58 ff.
  earliest, 58 f.
  examination of, 68, 70, 115 ff.

Banks — *continued:*
exchange charges of, 38, 59, 65 f.
famous, 119–140
Federal Farm Loan. *See* Federal Farm Loan Banks
Federal Reserve. *See* Federal Reserve Banks
in the United States, development of, 125 ff.
investments, knowledge of, 47, 170
joint-stock land, 157
kinds of commercial, 61
lack of, what results would be, 2 f.
land. *See* Federal Farm Loan Banks; Land banks
law of averages as applied to, 82
liabilities of, 106, 111 ff.
loans made by. *See* Loans
mutual. *See* Savings banks
origin of, 58 f.
national. *See* National banks
organization and administration of, 66
private. *See* Private banks
resources, 107 ff.
savings. *See* Savings banks
state. *See* State banks
thrift taught by, 1
usefulness of, 1–15
worthless investments, warnings against, given by, 170
Bank statement:
analysis of, necessity for understanding, 9, 107
analyzing a, 106–118
sample of, 107
Bank stock (*see also* Capital stock):
as an investment, 179 f.
certificate of, 62
illustration, 63
liability of holders of, 67, 70, 71, 75, 120, 156
Barcelona, bank in, in early fifteenth century, 58
"Bears," work of, 183 f.
Bill of lading, definition, 37
Bills payable secured by Liberty Bonds, explained, 112
Black Friday, 148
Bond houses, work of, 182, 183
Bonds:
corporation, 108, 174
cost of dealing in, 88
defined, 85, 174
forms of, 85
government, as investments, 178 f.
holders of, without voting power in a corporation, 174
interest rate on, 85 ff.
rule for finding, 87
Liberty, 108
municipal, 109, 182
railroad, 109
real estate, as investments, 180 ff.
United States, 108
value of, as investments, 174
Borrower, obligations of, 10
Borrowing money, frankness essential in, 10 f. *See also* Credit; Loans
Brokerage, 88
Budgets:
as a foundation for thrift, 190 f.
defined, 190
plan for the government, 189 f.
plan for the individual, 190 f.
Building and loan associations:
advantages and disadvantages of, 79
coöperative, another name for, 77
growth of, stimulated by need of thrift, 60
organization and management of, 77 f.
statistics concerning, 79
Bullion, defined, 60
"Bulls," work of, 183 f.
Business:
banks and, 1 ff.

crop conditions as indicative of prosperity in, 172
percentage of, carried on by checks and drafts, 1
prompt dealing essential to success in, 39 f.
value of charters to, 61 f.

Capital stock (*see also* Bank stock):
defined, 62, 111
in Federal Farm Loan Banks, 153, 155
in Federal Reserve Banks, 143 f.
Calling in of loans, 83
Canceling machine, 163
Cash on hand, defined, 110
Certificate of deposit:
demand, illustration, 34
interest-bearing, illustration, 35
kinds of, 34 f.
Certificate of stock, 62
illustration, 63
Character:
life insurance as a builder of, 185
the basis of credit, 10, 40
Charters, value of, to banks and business, 61 f.
Chase, Salmon P., and national bank system, 138
Check and draft as synonymous terms, 28. *See also* Checks; Drafts
Check book, 21
illustration, 22
necessity for care in records, 21 f.
Checking account as a record of receipts and expenditures, 8
Checks:
and drafts, percentage of business transactions carried on by, 1
as receipts, 26 f.
as vouchers, 26 f.
cashing of, 23
made payable to "bearer," 25
made payable to "order," 26
responsibility for loss in, 25 f.
certified, 26
dishonored, 28
indorsement of, 16, 25
made payable to "self," 25
indorser responsible for payment of, 28
out-of-town, depositing, 18
promptness necessary in depositing, 28
stolen, procedure for, 27
the use of, 21 ff.
work done by, 30
Check system as a restraint upon extravagance, 31
Chicago:
clearings of banks in, in 1919, 74
Continental and Commercial Bank, statistics concerning, 68
thrift project in schools of, 191 f.
Chinese, early bankers, 58
Circulation, 110, 112
Civil War, 137, 138
national bank system during, 138
Clearing houses:
advantages of, 73 f.
functions of, 72 f.
in Federal Reserve cities, 74
volume of business done by, 74
Collateral, 42
Colonial days, banks in, 128
Colorado, state banking laws in, 70
Commune, 125
Comptroller of the Currency:
annual report published by, 68
bank examiners reporting to, 149 f.

Comptroller of the Currency—*continued:*
by-laws for national banks provided by, 66
prosecutor of national banks, 67
supervisor of national banks, 67
Confederation, Robert Morris superintendent of finance of, 129
Constitution, the, 130, 132, 133
Coöperation:
the foundation of the Federal Reserve System, 147, 149
value of, 149 f.
Coöperative banks. See Building and loan associations
Corporation, of a private bank, 72
Counterfeit money, care in detecting, 164 f.
Credit:
banking one's, 7 f.
character the basis of, 10, 40
defined, 6
how secured, 39 ff.
kinds of, 6 f.
promptness, value of, in securing, 39 f.
restriction of, because of small bank balance, 32
trade acceptances and, 51 f.
Credit information, value of bank in supplying, 2 f.
Credit statements, 11
sample of, 12 f.
Crop conditions as indication of prosperity, 172
Cumulative, defined, 175
Currency. *See* Bank notes; Mints; Money
Customers, the bank and its, 16–57

Dawes, Charles G., 190
Days, a table of, 91, 92
Decimal system of money used in United States, 59
Deed box, 188
Demand deposits, defined, 144
Depositors:
and bank, obligations of, 9 ff.
prestige of, 8
protection of, 113 f.
Deposits:
demand, 144
guaranteed by law in Oklahoma, 79
how to make, 16, 18, 21
time, 144
Deposit slip, 16
illustration, 17
of a city bank, 18
illustration, 19
of a savings account, illustration, 20
special, 18
Directors, duties of, 66 f.
Discount:
explained, 43, 101
problem in, 102
rates of, established by the Federal Reserve Banks, 146
unearned, 111 f.
Dividend, passing, effect of, 176
Dollar exchange, growth of utility of, 55
Draft and check as synonymous terms, 28. *See also* Checks; Drafts
Drafts:
bankers', 35 f.
defined, 35
demand, illustration, 37
dishonored, 28
indorser responsible for payment of, 28
kinds of, 35 f., 38
percentage of business transactions carried on by checks and, 1
sight, 38 f.
illustration, 38
work done by, 35, 37 f.
Duncan, Henry, 76 (legend under illustration)

Education:
to teach thrift, 191 f.
to teach value of investments, 170 f.
Egibi and Sons, earliest bank, 58
England, Bank of:
a bankers' bank, 122
advantages of, 120 f.
bank notes issued by, 120
character and success of, 120
difference between, and Bank of France, 123
illustration, 121
liability of shareholders, 120
origin of, 119
Engraving and Printing, Bureau of, functions of, 161 f., 164
Estate, life insurance as a means of creating an, 185
Examiner. *See* Bank examiner
Exchange:
dollar, 55
London of first rank, 55
New York, 55
Exchange charges, 38, 65 f.
origin of, 59
Exchange quotations and Travelers' Checks, 54
Executor, trust companies as, 80
Extravagance, value of checking system as a restraint upon, 31

Farm Loan Banks. *See* Federal Farm Loan Banks
Farmers, value of Federal Farm Loan Banks to, 154
Federal Farm Land Banks. *See* Federal Farm Loan Banks
Federal Farm Loan Act passed, 81
Federal Farm Loan Associations, 153, 154 f.
Federal Farm Loan Banks, 152–158
administration of, 152
bonds as an investment, 157
capital stock of, 153
establishing act for, 152
joint-stock land banks under same act, 157
lending capacity of, 153 f.
liability of stockholders, 156
operation of, 154
penalty for default in payments on loans, 156
purpose of, 152
statistics concerning, 156
stock in, 153, 155
Federal Farm Loan Board, duties of, 152 f.
Federalist, The, 132
Federal Reserve Act, mentioned, 69
Federal Reserve Association:
state banks permitted to join, 71, 143
trust companies permitted to join, 143
Federal Reserve Banks, 141–151
and the World War, 143, 146 ff.
banks and districts of, 141 ff.
banks of banks, 143
capital stock, ownership of, 143 f.
currency issued by, 150
deposits required of members of, 144
dividends paid by, 144
exchange charges not allowed by, 66
functions of, 145
organization and management of, 143 ff.
purpose of, 141
relation of, to clearing houses, 74
reserve required by, 83
stock in, 143 f.
subtreasury system removed by establishment of, 167
volume of business done by, 150
working of the system, 145
Federal Reserve cities and branch cities named, 142
Federal Reserve System:
and dollar exchange, 55

Federal Reserve System—*continued:*
coöperation the foundation note of, 147, 149
described by Charles A. Peple, 146 ff.
Financial institutions, classification of, 60 f.
France, Bank of:
bank notes issued by, 125
character of, 123
illustration, 124
strength of, 123
Free-banking system, 137 f.

Gallatin, Albert, 73
Genoa, early trade in, 59
Georgia, state banking laws in, 70
Gold, as a standard of money, 5f.
Gold dollar, as a standard of value, 5 f.
Gold reserve, 125
Government bonds, as investments, 178 f.
Greece, early banks in, 58
Guardian, trust companies as, 80

Hamilton, Alexander, 130 ff.
Harding, W. P. G., quoted, 141
Houston, D. A., quoted, 153
Hypothecate, defined, 114

Identification:
for Travelers' Checks, 53
necessity of, for cashing checks, 23
Illinois:
private banks practically abolished in, 72
state banking laws in, 70
Indiana:
free-banking system successful in, 137
state banking laws in, 70
Indorse, definition, 16, 27
Indorsement:
of checks made payable to "order," 26
of checks made payable to "self," 25
Indorser, responsibility of, for payment of checks, drafts, and notes, 28
Industrials as investments, 183 f.
Interest:
bankers' method of computing, 98 f.
variations of, 99
cancellation method for computing, 99 f.
compound, 95 f.
problems in, 96, 100
computing, common form for, 96 f.
defined, 85
on interest, prohibited by law, 94
on notes, accruing after notes become due, 43
problems, 89 f.
rate of, on bonds, 85 ff.
rate of, on stocks, 87 ff.
rate of, on loans by Federal Farm Loan Banks, 155
reserve for, 112
6 per cent method, 97 f.
variation of, 98
Interest tables, to show how money grows, 169, 209
Investing, saving and, 168–196
Investment companies, 61
Investments:
bankers' information concerning, 14, 170
bank stock, 179 f.
bonds, 173 ff., 182 ff.
education to teach value of, 170 f.
Federal Farm Loan bonds, 157
government bonds, 178 f.
kinds of, 173 ff.
life insurance, 184 ff.
municipal bonds, 182 f.
patriotic, 169
real estate mortgages, 180 ff.
safe, 171, 172

selection of, 172
stocks, 173 ff.
trust companies the result of new types of, 60
warnings against worthless, 170
what not to buy, 177 f.
Iowa, state banking laws in, 70

Jackson, Andrew:
and the Second United States Bank, 135 f.
panic in administration of, 136
"specie circular" issued by, 136
subtreasury system outgrowth of work of, 166 f.
Treasury Building begun in administration of, 159
Jefferson, Thomas, 133
Joint-stock land banks, 157

Kansas, state banking laws in, 70
Kentucky, state banking laws in, 70

Land banks (*see also* Federal Farm Loan Banks):
known in Europe, 81
reasons for founding, 81
when organized, 81
Law, John, 123, 128
Legal tender, defined, 120
Leap year, counting interest for, 91, 97
Letters of credit, 52
issued by banks of ancient Greece, 58
Liabilities of a bank:
defined, 106
kinds of, 111 ff.
Liability of stockholders, 180
in Bank of England, 120
in Federal Farm Loan Banks, 156
in national banks, 67, 70
in private banks, 71
in savings banks, 75
in state banks, 70
Liberty Bonds, warning against exchanging for worthless securities, 170
Life insurance:
as a means of creating an estate, 185
as a means of saving, 185
early purchase of, desirable, 185 f.
exempt from inheritance tax, 186 f.
value of, 184 ff.
"Liquid," defined, 47, 106
Loans:
benefits of, to business, as made by banks, 2
by Federal Farm Loan Banks, limitation of, 155
by Federal Reserve Banks, 145
calling in, 83
demand, 106 f.
how secured, 39 ff.
necessity of security for, 42
making of, part of bank's business, 65
short-time, why banks make, 47
time, 108
London:
as a financial center, 55, 120
early trade in, 59
exchange, 55
Loss, responsibility for:
by bank if check is paid to wrong person, 26
by bank if "stop-payment" order is ignored, 27
by maker of carelessly drawn check, 25
Louisiana, free-banking system successful in, 137

Macerator, work of the, 163 f.
Married woman, signature of, 30
Maryland, state banking laws in, 70
Massachusetts, days of grace allowed for sight draft in, 39

Minnesota, state banking laws in, 70
Mints, the:
location of various, 165
method of coining money, 165 f.
the Treasury and, 159–167
work of, 165
Mississippi Scheme, 123, 128
Money (*see also* Bank notes; Mints):
and credit, 3 ff.
cheap, cause of, 126
coining of, 165 f.
counterfeit, detection of, 164 f.
decimal system of, used in the United States, 59
definition of, 4, 168
function of, 4
gold as a standard of value, 5
hoarding, effect of, 5
how interest increases, 169, 209
issued by Amsterdam bank, 60
issued by England, 59
issued by France, 59
issued by Germany, 59
issued by the United States. *See* Bank notes; Mints
kinds of, 4, 5 f.
origin of, 5
paper, secured by gold and silver, 6
printing of, 161 f.
prosperity developed by, 5
redemption of, 110, 163
silver as a standard, 5
variations in value of, 6
Money and Banking, by Horace White, quoted, 4
Monthly statement, 32
illustration, 33
Morgan, J. Pierpont, 41, 187
Morris, Robert, and connection with banking in the United States, 128 ff.
Mortgage, defined, 108
Mortgages, real estate, as investments, 180 ff.
Municipal bonds as investments, 182 f.
Mutual banks. *See* Savings banks

Napoleon I, founder of bank of France, 123
National banks:
as administrators, executors, guardians, or trustees, 69
capital required for, 67 ff.
currency issued by, 69
importance of, 139
liability of stockholders, 67, 70
organization of, 66
statistics concerning, 68 f.
National bank system, 138 f.
of Civil War period, 138 f.
Negotiable instrument, defined, 51
New England, free-banking system successful in, 137
New Jersey, state banking laws in, 70
New Mexico, state banking laws in, 70
New York City:
as financial center, 55
Federal Reserve Bank in, 150
National Bank of Commerce, statistics concerning, 68
National City Bank, statistics concerning, 68
New York state:
free-banking system begun by, 137
savings bank law in, 75
North America, Bank of, 128 ff.
illustration, 131
North Carolina, state banking laws in, 70
Note:
defined, 42
with collateral, 43, 46 f.
illustration, 44 f., 48 f.
without security, 42 ff.
illustration, 43
responsibility of indorser for payment of, 28

when interest begins to accrue, 43

Ohio, free-banking system successful in, 137
Oklahoma:
  bank deposits guaranteed by law in, 79
  state banking laws in, 70
"Old Lady of Threadneedle Street," 120
Out-of-town checks, depositing, 18
Overbonding, dangers of, 175 f.
Overdrafts, poor policy, 22 f., 41

Panic:
  Black Friday, 148
  in case of, 113 f.
  of 1837, 136
  of 1857, 139
  of 1907, 79
Partial payments, 91, 93 f.
  problems, 95
Pass book, 16
Paper money, metal basis of, 128. *See also* Bank notes; Money
Patriotism:
  of bankers during World War, 14
  of investors during World War, 169 f.
Patterson, William, founder of Bank of England, 119
"Pays out," defined, 78
Pay-roll slip, illustration, 24
Pennsylvania, state banking laws in, 70
Peple, Charles A., quoted, 146 ff.
Personal-property security, 42
Personal security, 42
Philadelphia:
  First United States Bank in, 133
  Second United States Bank in, 135
Philadelphia Savings Fund Society, illustration, 127
Postal savings system, 79 f.
  statistics concerning, 80
Private banks:
  as corporations, 72
  liability of owners, 71
  security of, 72
Problems, 89 f., 95, 96, 100, 102, 103
Proceeds, defined, 101
Promptness essential to success in business, 39 f.
Protection of depositors and stockholders, 113 f.
Protectograph, 25
Protest, defined, 28

Questions for discussion, 15, 55 ff., 83 f., 117 f., 139 f., 150 f., 157 f., 167, 195 f.

Real estate mortgages and bonds as investments, 180 ff.
Real estate security, 42
Receipts, checks as, 26 f., 31
Redemption fund, 109 f.
Redemption of money, 163
Rediscount:
  as a barometer of trade in England, 120
  defined, 122
Rediscounting by Federal Reserve Banks, 145
Reserve:
  gold, 125
  for interest, 112
  required by Federal Reserve System, 83
Resources of a bank, 106 ff.
Revolutionary War, 129
Rhode Island, days of grace allowed for sight draft in, 39

Safety deposit vaults, 187 ff.
Saving (*see also* Thrift):
  and investing, 168–196
  institutions for encouraging, 61, 75 ff.
  life insurance as a means of, 185

Saving —*continued:*
object of, 168
Savings banks:
growth of, 77
mutual, another name for, 75
organization of, 75 f.
New York law regarding, 75
statistics concerning, 77
Savings institutions, 61, 75 ff.
Schools:
patriotism and thrift in, during World War, 193 f.
thrift projects for, 191 ff., 198 ff.
Security, kinds of, 42
Signature:
method for, 29 f.
of married woman, 30
Signature card, 29
illustration, 29
Silver as a money standard, 5
Six per cent method of computing interest, 97 f.
variations of, 98
South Carolina, state banking laws in, 70
Specie payment, defined, 134
State banks:
importance of, in field of banking, 70 f.
importance of, in smaller communities, 71
in Federal Reserve System, 71, 143
liability of stockholders in, 70
of issue, 136
organization of, 69 f.
under free-banking system, 137 f.
Statistics:
concerning building and loan associations, 78 f.
concerning Federal Farm Loan Banks, 157
concerning largest banks in United States, 68
concerning New York Federal Reserve Bank, 150
concerning postal savings, 80
Stock (*see also* Bank stock; Capital stock; Stocks):
common, as an investment, 175
defined, 87
fluctuations in values of, 175 ff.
preferred, as an investment, 175
Stockholders:
liability of, 67, 70, 71, 75, 120, 156, 180
in Bank of England, 120
in Federal Farm Loan Banks, 156
in national banks, 67, 70
in private banks, 71
in savings banks, 75
in state banks, 70
protection of, 113 f.
Stockholm, first European bank of issue in, 58
Stocks:
care in buying, 173
cost of dealing in, 88
effect of World War on, 177
industrial, as investments, 183 f.
rate of profit on, 87 f.
what not to buy, 177 f.
"Stop-payment order," 29
Subtreasury system:
origin of, 166 f.
passing of, 166 f.
Surplus, defined, 62, 111

Taft, President, 80
Thrift:
budget system as a foundation for, 190 f.
growth of building and loan associations stimulated by need of, 60
growth of savings banks stimulated by need of, 60 f.
influence of, in the nation, 76
in the schools, teaching, 191 f., 197 ff.
means of encouraging, 193 f.

project in Chicago schools, 191 f.
publications for schools, 193, 194
taught by banks, 1
Thrift Projects, 193, 198 ff.
Time deposits, defined, 144
Time merchant, defined, 7
Trade acceptance:
defined, 51
advantages of, 52
value of, in obtaining credit, 51 f.
Travelers:
usage among, 52 ff.
value of drafts to, 36
Travelers' Checks, 53 f.
illustration, 54
Treasury Department:
and the mints, 159–167
departments of government housed in building, 159 f.
kinds of work done by, 160 f.
Hamilton and the, 132
origin of, 159
Treasury, Secretary of the, chairman of Federal Farm Loan Board, 152
Trust companies:
advantages of, 81
as executors, administrators, guardians, etc., 80
functions of, 80 f.
in Federal Reserve System, 143
result of new types of investments, 60

Undivided profits, 111
Unearned discount, 43, 111 f.
United States (*see also* Money; various headings under Banks; various names of states, etc.):
early banks in, 128
United States, First Bank of the, 133 f.
United States, Second Bank of the, 134 f.
Utah, state banking laws in, 70

Van Buren, Martin:
panic in administration of, 136
subtreasury system founded by, 166 f.
Venice:
bank in, in thirteenth century, 58
early trade in, 59

Walker, F. A., quoted, 4
Warehouse receipts, 47
illustration, 50
War of 1812, 134
War Savings Stamps, earnings on, 210
Washington, George, 129, 130, 132
Washington, state banking laws in state of, 70
West Virginia, state banking laws in, 70
White Horace, quoted, 4
"Wild-cat" banks and panic of 1837, 136
"Wild-cat" speculation, bankers' ability to prevent, 14
William and Mary, Bank of England and, 119
Wisconsin:
number of state banks in, 71
state banking laws in, 70
World War:
bankers and, 14
Bank of England and, 123
Bank of France and, 125
Federal Reserve Banks and, 143, 146 f.
investors and patriotism during, 169 f.
schools and thrift during, 193 f.
stock values as affected by, 177